

U.S. Department of Education

Washington, D.C. 20202-5335



**APPLICATION FOR GRANTS
UNDER THE**

Statewide, Longitudinal Data Systems

CFDA # 84.372A

PR/Award # R372A120019

Grants.gov Tracking#: GRANT11026213

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.).

There were problems converting one or more of the attachments. These are: 1239-WVDE SLDS Appendix B Letters of Support.pdf

Application for Federal Assistance SF-424

* 1. Type of Submission:

- Preapplication
 Application
 Changed/Corrected Application

* 2. Type of Application:

- New
 Continuation
 Revision

* If Revision, select appropriate letter(s):

* Other (Specify):

* 3. Date Received:

12/15/2011

4. Applicant Identifier:

5a. Federal Entity Identifier:

5b. Federal Award Identifier:

State Use Only:

6. Date Received by State:

7. State Application Identifier:

8. APPLICANT INFORMATION:

* a. Legal Name:

West Virginia Department of Education

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

556000768

* c. Organizational DUNS:

8247003710000

d. Address:

* Street1:

1900 Kanawha Blvd. East

Street2:

Building 6, Room 358

* City:

Charleston

County/Parish:

Kanawha

* State:

WV: West Virginia

Province:

* Country:

USA: UNITED STATES

* Zip / Postal Code:

25305-0330

e. Organizational Unit:

Department Name:

WV Department of Education

Division Name:

Superintendent's Office

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

Prefix:

Dr.

* First Name:

Monica

Middle Name:

Ann

* Last Name:

Beane

Suffix:

Ed.D

Title:

Assistant Director, Office of Research

Organizational Affiliation:

WV Department of Education

* Telephone Number:

304.558.2546

Fax Number:

304.558.1613

* Email:

mbeane@access.k12.wv.us

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.):

WVDE SLDS Areas Affected by Project.pdf | Delete Attachment | View Attachment

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

Development of a Comprehensive State Longitudinal Data System for West Virginia Public Schools

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="4,798,679.45"/>
* 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="4,798,679.45"/>

*** 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:

Development of a Comprehensive State Longitudinal Data System for West

Virginia Public Schools

Areas Affected by the Project

This project will affect all 55 county school systems located in West Virginia. The proposal includes the establishment of a Data Governance Committee (DGC) and will seek representation from across the geographical regions of the state. Additionally, professional development for LEAs will occur in multiple points of the state utilizing the eight (8) Regional Educational Support Agencies (RESAs).

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>Monica Beane</p>	<p>* TITLE</p> <p>State Superintendent of Schools</p>
<p>* APPLICANT ORGANIZATION</p> <p>West Virginia Department of Education</p>	<p>* DATE SUBMITTED</p> <p>12/15/2011</p>

DISCLOSURE OF LOBBYING ACTIVITIES

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

Approved by OMB
0348-0046

1. * Type of Federal Action: <input type="checkbox"/> a. contract <input checked="" type="checkbox"/> b. grant <input type="checkbox"/> c. cooperative agreement <input type="checkbox"/> d. loan <input type="checkbox"/> e. loan guarantee <input type="checkbox"/> f. loan insurance	2. * Status of Federal Action: <input type="checkbox"/> a. bid/offer/application <input checked="" type="checkbox"/> b. initial award <input type="checkbox"/> c. post-award	3. * Report Type: <input checked="" type="checkbox"/> a. initial filing <input type="checkbox"/> b. material change
--	--	--

4. Name and Address of Reporting Entity:
 Prime SubAwardee

* Name: West Virginia Department of Education

* Street 1: 1900 Kanawha Blvd. East * Street 2: Building 6, Room 358

* City: Charleston * State: WV: West Virginia * Zip: 25305

Congressional District, if known: WV-002

6. * Federal Department/Agency: US Department of Education	7. * Federal Program Name/Description: Statewide Data Systems CFDA Number, if applicable: 84.372
--	---

8. Federal Action Number, if known: 	9. Award Amount, if known: \$
--	---

10. a. Name and Address of Lobbying Registrant:

Prefix: * First Name: N/A Middle Name: * Last Name: N/A Suffix: * Street 1: * Street 2: * City: * State: * Zip:

b. Individual Performing Services (including address if different from No. 10a)

Prefix: * First Name: N/A Middle Name: * Last Name: N/A Suffix: * Street 1: * Street 2: * City: * State: * Zip:

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

* Signature: Monica Beane

* Name: Prefix: Dr. * First Name: Joreia Middle Name: M. * Last Name: Marple Suffix: Ed.D.

Title: State Superintendent of Schools Telephone No.: 304.558.2681 Date: 12/15/2011

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**

West Virginia Department of Education

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

Prefix: Dr. * First Name: Jorea Middle Name: M.

* Last Name: Marple Suffix: Ed.D

* Title: State Superintendent of Schools

*** SIGNATURE:** Monica Beane

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

SUPPLEMENTAL INFORMATION
REQUIRED FOR
DEPARTMENT OF EDUCATION GRANTS

1. Project Director:

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

Mr. Marshall Patton

Address:

* Street1: 1900 Kanawha Blvd. East
 Street2: Building 6, Room 346
 * City: Charleston
 County: Kanawha
 * State: WV: West Virginia
 * Zip Code: 25305-0330
 * Country: USA: UNITED STATES

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

304.558.8869 304.558.2584

Email Address:

mlpatton@access.k12.wv.us

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) #: Our strategies to achieve this evaluation have been determined to be exempt from the regulations under exemption 2.

No Provide Assurance #, if available:

Please attach an explanation Narrative:

WVDE SLDS Exempt Research Narrative.pdf [Delete Attachment](#) [View Attachment](#)

***Development of a Comprehensive State Longitudinal Data System for
West Virginia Public Schools***

Exempt Research Narrative:

The proposed evaluation research described in our project narrative shall be 1) limited to tracking the development of the SLDS and corresponding implementation of related training/professional development programs, and 2) evaluating outcomes of the SLDS training/PD on end-user capacity to effectively use the SLDS and to make data-informed decisions. The study of these outcomes shall involve human subjects and, because it will be a systematic investigation from which we hope to generalize findings, it also meets the definition of “research” as described in the instructions for USDE Supplemental information for the SF-424.

Our strategies to achieve this evaluation have been determined to be exempt from the regulations under *exemption 2*. As noted, we will engage human subjects in order to document key project milestones/activities, gather perceptions of the quality and impact of associated professional development, and determine capacity to use SLDS data to drive educational decision-making. This information will be collected via surveys, interviews, and observations. However, each data collection activity will be deployed in a manner such that we will not collect identifiable information from these participants—no names or identifiers linked to personally identifiable characteristics will be collected. All data collection activities will be completely anonymous. Furthermore, all public reporting of evaluation data will be in the aggregate and attributable only to generic role groups (e.g., teachers, principals, SEA staff, etc).

The remaining elements of our SLDS plan do not meet the definition of “research” described in SF-424. However, our plan to address privacy requirements of protected data to be warehoused within the SLDS is described in detail as part of the project 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.]

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

Project Title: *Development of a Comprehensive State Longitudinal Data System for West Virginia Public Schools*

The West Virginia Department of Education (the SEA) seeks funding under Priority 1. K-12 Data System to design, develop, and implement a state longitudinal data system (SLDS) for pre-K through 12th grade. While the current West Virginia Education Information System fulfills state and federal minimum reporting requirements, it does not meet all the rapidly evolving data demands of public education in the 21st century. With funding from this grant, West Virginia will develop a comprehensive SLDS that provides educators, policy makers, and researchers with access to essential data and data-analysis tools to support student achievement and school improvement.

The first goal is to establish the SLDS formal governance and policy requirements with the following objectives: (1.1) define the needs and uses of the SLDS, (1.2) establish a comprehensive governance structure for the SLDS, (1.3) build institutional support for the SLDS, and (1.4) establish a sustainability plan for the SLDS. The second goal is to address technical requirements related to key data elements within the SLDS with the following objectives: (2.1) establish guidelines and requirements for inclusion of data elements that address federal reporting requirements, (2.2) establish guidelines and requirements to uphold privacy, (2.3) develop processes and procedures to ensure high data quality for key elements in the SLDS, (2.4) ensure interoperability between the SLDS elements and external systems, and (2.5) enhance current enterprise-wide architecture. The third goal is to promote access to and use of data from the SLDS with the following objectives: (3.1) select an SLDS solution that supports secure access for all user levels of the SLDS, (3.2) ensure that deliverables are developed and targeted toward the end users' needs as specified in governance documents, (3.3) establish and implement a professional development structure on how to access and use data tools and products, (3.4) establish and implement a professional development structure to apply and interpret data to inform decision making, (3.5) establish a process for evaluating effectiveness of data tools and related professional development, (3.6) establish policies to ensure effective partnerships with the research community, and (3.7) establish a sustainability plan for data access tools, processes, and training.

The primary deliverable will be West Virginia's new comprehensive SLDS, which will be disseminated via a new web-based portal. Another deliverable will be a data governance structure, which will include teachers, school leaders, parents, researchers, and state agency representatives. These stakeholders will provide input into the design and ongoing improvement of the SLDS to meet their needs for timely and accurate data and reporting to support student achievement, school improvement, and accountability. The project also will provide tools for using the data effectively and develop an ongoing professional development program for all levels—from teachers to state-level policy makers—regarding use of the data.

Project Narrative File(s)

* Mandatory Project Narrative File Filename:

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

Add Optional Project Narrative File

Development of a Comprehensive State Longitudinal Data System for West Virginia Public Schools

Project Narrative

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Introduction

The West Virginia Department of Education (WVDE) seeks funding under Priority 1: K-12 Data System to design, develop, and implement a state longitudinal data system (SLDS) for pre-K through 12th grade (P-12). With funding from this grant, West Virginia will develop a comprehensive SLDS that provides educators, policy makers, and researchers with access to essential data, data-analysis tools, and professional development to support student achievement and school improvement.

While the current West Virginia Education Information System (WVEIS) fulfills state and federal minimum reporting requirements, it does not meet all the rapidly evolving data demands of public education in the 21st century, particularly the need for data to drive educational decision making at all levels. In addition, West Virginia's data needs are expected to grow exponentially and unpredictably due to pending revisions to the Elementary and Secondary Education Act (ESEA). Without substantial investments of time and funding, the state's P-12 data system will fail to meet these new challenges and we will be left behind in this critical transition.

While West Virginia has always been committed to supporting an SLDS over the long term, it does not currently have the substantial financial resources needed to develop such a system for P-12. The WVDE applied for an SLDS grant in 2009 to develop a P-20 system but did not receive funding—West Virginia is one of only eight states never to have received an SLDS grant. In response, the state legislature and governor authorized the use of State Fiscal Stabilization Funds to develop a new P-20 system, which is now in the initial implementation stage. The system is fed primarily from the existing P-12 transactional data system (WVEIS). As a result, the data-quality issues in the WVEIS are more critical than ever. In response to these challenges, the WVDE has narrowed the focus of this application (from a P-20 to a P-12 system) and addressed reviewer comments on the previous proposal.

In 2011, the Data Quality Campaign noted that West Virginia has met all 10 of the 10 essential data elements required for creating a culture of effective data use where high-quality data drive decisions to increase student achievement. As a result, West Virginia is well positioned to make the transition from a common student information system (SIS) to an SLDS that enables users to make data-driven decisions. The Data Quality Campaign also noted, however, that West Virginia needs to take five action steps to overcome “potential barriers to making effective data use a reality in education”: (1) link state K-12 data systems with early learning, postsecondary education, workforce, social services and other critical agencies; (2) implement systems to provide all stakeholders with timely access to the information they need while protecting student privacy; (3) create reports that include longitudinal statistics on school systems and groups of students to guide school-, district-, and state-level improvement efforts; (4) implement policies and promote practices, including professional development and credentialing, to ensure educators know how to access, analyze, and use data appropriately; and (5) promote strategies to raise awareness of available data and ensure that all key stakeholders, including state policy makers, know how to access, analyze, and use the information.

The WVDE feels strongly that its burgeoning P-20 system eventually will address the first of these action steps and that funding from this grant will address the four remaining

challenges. In addition, the establishment and maintenance of a high-quality P-12 SLDS will not only improve the function of West Virginia’s public schools, it will dramatically improve the quality of the data elements that feed the state’s P-20 system.

A. Need for the Project

A.1 Need for Goal 1: Establish SLDS Formal Governance and Policy Requirements

A.1.1 Need and Uses

A successful data system provides information to improve student achievement while addressing other key state educational policy questions through data and data-use tools for educational decision making.

Current System. The WVEIS is a common SIS used by all West Virginia public schools and districts for most administrative student, employee, and financial functions. It provides all the necessary information for school, district, ESEA, and Individuals with Disabilities Education Act (IDEA) accountability and for all federal and state reporting, such as monitoring the West Virginia Board of Education’s annual goals.

The transactional SIS is used primarily by administrators and secretarial staff for data entry and day-to-day operations, but, recently, a web interface—WVEIS on the Web (WoW)—was developed by the WVDE Office of Information Systems (OIS). The WoW, which has been introduced at the discretion of individual LEAs, allows educators to use the WVEIS’s real-time data to drive personalized and differentiated instructional decisions. In addition, the WVDE has recently implemented another interface: Data Portal for 21st Century Success (DP-21). This static reporting tool provides very specific information around a few indicators that target school and student success. SEA and LEA staff members routinely use various WVEIS data elements to determine technical assistance and professional development needs of schools and students, to plan educational interventions, and to monitor and evaluate the efficacy of programs.

During the past year, West Virginia has begun implementing a separate P-20 longitudinal data system maintained by a third-party partner: the West Virginia Network. This system links selected critical data elements from the WVEIS to postsecondary data collected from the state’s public higher education institutions. Since the P-20 system is intended to drive policy decisions, the need for high-quality source data from the WVEIS is more critical than ever.

Limitations. The WVEIS contains multitudes of data that are relevant to many research and policy questions (e.g., those associated with the No Child Left Behind Act); however, the WVDE currently lacks an agreed-upon, well-defined, and formal set of critical research and policy questions that represent all the information needs of the state’s P-12 stakeholders. This is because there has never been a responsible party or formal structure (e.g., a Data Governance Committee) to facilitate an organized dialog about data needs between the stakeholders and the entity that collects and warehouses the data—the OIS. As a result, stakeholders do not fully understand the various data elements in the WVEIS, the schedule and business rules under which the elements are collected, or the elements’ limitations. In addition, there is no public mission statement or prescribed set of goals and objectives that establishes the WVEIS as the authoritative

source of P-12 information. As such, WVDE staff regularly must redirect their efforts away from daily work to run individual reports or queries rather than defining the needs and uses of the system or building systematic reports to address the stakeholders' collective needs.

Planned. The success of the SLDS project hinges upon a detailed project management plan from the outset—one that culminates in a shared vision and common understanding among P-12 stakeholders regarding the project's anticipated activities and time frame, and its potential impact. The project will provide funding to support an SLDS Project Manager (.50 FTE), who will oversee all aspects of the SLDS grant, and to hire a Data Governance Manager (1.0 FTE), who will chair a new comprehensive Data Governance Committee and help manage the project. The WVDE will also hire essential support staff (2.0 FTE) to provide administrative assistance to the SLDS staff. The Data Governance Committee, supported by SLDS funds, will identify Data Stewards from WVDE's program offices, LEAs, and Regional Education Service Agencies (RESAs) to communicate their data needs and generate a set of key research and policy questions for the new SLDS. These questions will be publicized and help define and prioritize the data elements to be imported from the WVEIS to a vendor-developed SLDS data warehouse and data access portal. This aspect of the project will also produce an SLDS mission statement, establishing the goals of the new SLDS and underscoring the SLDS as the authoritative source for P-12 data. In this way, the SLDS grant will provide the impetus and the much-needed formal structure for the WVDE to convene representatives of its P-12 stakeholders, all of whom require information from the SIS. For more details, see Section B.1.1.

A.1.2 Governance

The data system governance structure should involve state and local stakeholders in a collaborative effort, creating a common understanding of data ownership, management, and confidentiality that accounts for the changing nature of education.

Current System. The OIS maintains and continually improves the WVEIS to meet the needs of teachers, schools, LEAs, and the SEA. The OIS handles data requests from internal and external agencies and assists in most federal and state reporting. The OIS's loose governance structure includes WVDE-supported staff based in RESAs who assist local WVEIS users in each LEA. In addition, through a recent agreement with the West Virginia Higher Education Policy Commission, OIS staff members are collaboratively developing and implementing the P-20 longitudinal data system, which draws the vast majority of its source data from the WVEIS.

Limitations. West Virginia lacks a clearly articulated enterprise-wide system of P-12 data governance that defines responsibility and ownership of key data elements or that establishes the WVEIS as the only definitive source of P-12 information. The WVEIS system has expanded exponentially over time in terms of the volume of data and the number of stakeholders who require access to those data. The loose governance structure, and its small set of business rules and formal documentation, has not kept pace with this expansion. While the structure includes regional and local information users, it does not involve representation from all WVDE program administration offices (e.g., Title I, Special Programs, Assessment, Research). Since these offices have immediate and high-stakes information needs, they have liaised independently with the OIS to meet their diverse data and reporting requirements.

This loose governance structure will be greatly problematic during the transition from a compliance-driven data system to a decision-making engine. The WVEIS features a wide array of information, including data elements that have been used to manage day-to-day operations and, as such, have not been rigorously validated. Addressing data-quality issues is impossible without a systematic and clear system of data governance and identification of data stewards. This grant is absolutely essential to the WVDE's ability to develop such a structure—one that will perpetuate a culture of data literacy and transparency at a time when these issues are more important than ever.

Planned. The SLDS Data Governance Manager and related SLDS staff will work with WVDE to establish a three-level formal governance structure consisting of (1) a Data Policy Committee composed of key representatives from the WVDE, the legislature, higher education, and political action groups; (2) a Data Governance Committee with a set of established Data Stewards from WVDE program offices and LEA/RESA representatives; and (3) a formal structure for establishing ad hoc and mission-focused Data Steward Task Teams to resolve various data issues and to establish the priorities and critical data elements for the SLDS. The Data Governance Committee also will develop an SLDS website, which will house all related governance documents and disseminate all SLDS materials to the public. Ultimately, this space will serve as the home of a vendor-developed SLDS data access portal and as an information hub for P-12 information. Long term, the governance structure will produce a shared understanding of the SLDS data elements, ownership and privacy concerns, and the elements' limitations and potential uses. The Data Governance Committee also will serve as a forum for P-12 stakeholders' needs. For more details, see Section B.1.2.

A.1.3 Institutional Support

A data system requires institutional support from the SEA and relevant stakeholders, including authorization for the SLDS and the commitment of staff and resources.

Current System. As evidenced by the legislature's authorization of the WVEIS in 1991, the WVDE and its 57 LEAs have long supported a data system that integrates student, personnel, and financial information. In addition, by implementing a unique student identifier in 2004, West Virginia began warehousing longitudinal data long before many other states. In spring 2009, the legislature passed an enabling law that authorized, under the Family Educational Rights and Privacy Act (FERPA), a P-20 longitudinal shared information system. Then, as noted, the governor committed State Fiscal Stabilization Funds to create this system (now in the initial implementation stage). As another example of institutional support, the WVDE's Office of Research (established in 2008) works routinely with the WVDE program offices to ascertain the efficacy of programs that use WVEIS data.

Limitations. There are many institutional and political obstacles that relate to data quality, namely the lack of a formal governance structure (see A.1.2). Likewise, the lack of defined data stewardship among the WVDE's program offices has made it difficult to prioritize the OIS's work, resulting in gross inefficiencies and various redundancies in collecting and reporting data.

Planned. The Data Policy Commission, established as the top level of the governance structure, will serve as a conduit between the Data Governance Committee and high-level decision makers who can remove the obstacles. This new group will generate unprecedented

political support for the SLDS. In addition, the WVDE will commit staff time to serve on the Data Governance Committee, the various Data Steward Task Teams, and an SLDS Steering Committee. For more details, see Section B.1.3.

A.1.4 Sustainability

Following implementation, a successful data system requires ongoing support from the SEA, including commitments of staff and other resources for system maintenance, quality control, and user training.

Current System. The state legislature, the WVDE, and the governor's office have long supported and sustained the WVEIS (see A.1.3). With the introduction of the unique student identifier in 2004, this system has become the foundation of the daily work of West Virginia's schools, teachers, and SEA staff. The WVEIS is now an indispensable tool for all aspects of student management, payroll, and even child nutrition information. As such, the state has a vested interest in sustaining the system. More recently, the legislature has supported the burgeoning P-20 project—indicating its long-term commitment to longitudinal data systems.

Limitations. While the WVDE has received substantial legislative funding for the existing WVEIS, the system is aging and is increasingly unable to meet the rising demands for data. In addition, there are no resources available to implement a new and more modern solution. For this reason, the SLDS grant funds are critical. Without this intervention, the WVDE will be significantly challenged in terms of funding to implement an SLDS.

Planned. Funding from this grant will create a turnkey solution and several sustainable products, including a stable governance structure, a new and authoritative SLDS data warehouse, and a set of high-quality data visualization tools to drive educational decision making. Once the SLDS is implemented, the WVDE will maintain it by redirecting some current efforts, including unprecedented staff resources from six WVDE divisions, more than 25 WVDE offices, and local and regional education agencies. This in-kind contribution will support the implementation of the SLDS and help sustain it long term. In addition, the efficiencies produced by the new SLDS will free up time among OIS staff to help maintain the system. The WVDE also will submit a request to the legislature to fund the Data Governance Manager position beyond the scope of this grant to oversee ongoing revisions to the governance structure, to add research/policy questions, and to add new critical data elements from the transactional SIS to the SLDS warehouse. Sustainability will be a running agenda item at every meeting from the beginning of the project. Near the end of the grant period, the WVDE will develop and present a sustainability roadmap to the legislature and Data Policy Committee. For more details, see Section B.1.4.

A.2 Needs for Goal 2: Address Technical Requirements Related to Key Data Elements in the SLDS

A.2.1 Federal Reporting

A successful data system meets federal reporting requirements and provides efficiencies that reduce the reporting burden for schools and districts.

Current System. The WVDE has consistently participated in all required federal reporting activities, including ED Facts, the Consolidated State Performance Report (CSPR), and Section 618 reports required by IDEA. In addition, the WVDE has helped LEAs decrease their reporting burdens in areas such as the Office of Civil Rights data collection. The WVEIS contains the data for these critical reports, including student demographic information, assessment records, exit and discipline information, highly qualified teacher status, and disaggregated reports for students with disabilities.

Limitations. The WVEIS does not have a comprehensive data dictionary to explain the data elements or how they contribute to federal and state reporting, nor is there a centrally understood, or continuously maintained, set of critical research/policy questions to illustrate all required reporting. So far, the WVEIS has been adapted sufficiently to accommodate the regularly expanding list of required state and federal data elements; however, while the WVDE has kept pace with the changes, it has not been able to document them properly. As a result, many of the system's users do not fully understand the exact data elements warehoused in the WVEIS, where the definitive sources for these elements can be found, the business rules and validation criteria under which they are collected, or which reporting requirements each element supports.

Planned. As outlined in Sections A.1.2 and B.1.2, the project's data governance structure will vastly enhance user understanding of the purposes and goals of the SLDS—namely, improved efficiency of federal and state reporting. Based on the critical research/policy questions compiled during this project, the Data Governance Committee will develop a list of critical data elements to be housed in a comprehensive SLDS data dictionary. These data elements will be inclusive of those required for federal/state reporting. For more details, see Section B.2.1.

A.2.2 Privacy Protection and Data Accessibility

Confidentiality of data—as required by FERPA—must be assured, and public documentation pertaining to data access is a necessity.

Current System. While the legislature funds and the WVDE manages the WVEIS, data ownership resides with the state's LEAs. As such, the WVDE has maintained a rather conservative stance regarding the use of these data. Only a limited number of WVDE staff members have access to the transactional SIS; they are responsible for providing nearly all the information that stakeholders need for federal/state reporting, that researchers need for studies, that policy makers and program staff need for critical decision making, and that technical assistance providers and LEAs need to carry out their work. The only publicly disseminated information, such as enrollment and assessment data, are controlled and aggregated by the WVDE, and minimum cell counts are used to protect privacy. The WVDE does not share personally identifiable information with external agencies. This central approach helps protect privacy but at great expense to openness and access.

Limitations. The WVDE faces various privacy and confidentiality challenges while transitioning from a compliance-based system to a comprehensive decision-making engine. Providing broad access to data will raise questions that have not been encountered with the WVEIS. Changing rules under FERPA, demands for data at the state and federal levels, and open access to data require a thorough analysis of legal requirements and public documentation.

Planned. The WVDE understands the value of accessible, transparent, and accountable data; at the same time, data access rules and procedures must facilitate appropriate data usage and ensure individual privacy. Therefore, from the project's outset, the privacy issue will be at the forefront of all data-quality efforts. The governance structure will address these issues and specify which data will be accessible to certain users for specific purposes. Users who need access to personally identifiable information will be bound by a set of non-disclosure agreements (NDAs). The Data Governance Committee will define all necessary SLDS role access groups (e.g., stakeholders) at the beginning of the project. These roles, and their data needs, will be detailed in a Role Access Guidance Document. In addition, the SLDS will use state-of-the-art authentication and security technologies to assign different access levels and impose strict rules for data suppression and aggregation. The WVDE also will create standardized but flexible data-sharing agreements for external research. For more details, see Section B.2.2.

A.2.3 Data Quality

A successful data system ensures data integrity, security, and quality through system tools, training for data entry, and monitoring for data accuracy.

Current System. LEAs enter data into the WVEIS on a daily basis. The WVDE currently addresses data quality through standardized key data elements, codes, and rules for data entry and federal and state reports. For many federal reports, LEAs run local programs, including audits, to detect data errors prior to submission. The WVDE notifies the LEAs in advance regarding when it will extract certain data. After extracting the calendared data elements, WVDE staff review data quality and contact the LEAs to correct errors prior to completing the state or federal reports.

Limitations. Due to increasing federal and state reporting requirements, not all data are included in these schedules. As new data collections have been implemented, the auditing and reporting programs—for LEAs to create and check reports prior to submitting data files to the WVDE—have not kept pace. With the WVEIS expanding beyond mere compliance, the WVDE needs the ability to conduct more high-quality real-time edits. It is essential to develop new auditing and reporting programs to track the non-calendared data elements, particularly since educational decisions are being made based on these data.

Planned. The WVDE is planning new tools and processes to ensure the SLDS contains the highest-quality data. A series of Data Steward Task Teams will review the current business rules and the associated validation processes for critical data elements and make recommendations for improving their quality (once identified). These recommendations will include a set of real-time edits. The SLDS grant funds will allow the WVDE to secure contracted program services (1.5 FTE) to implement these changes. These programmers will also develop a set of training modules that detail the changes and that can be directly embedded into the WVEIS to ensure all transactional users are exposed to best practices for validating data during the input process. The WVDE will host eight regional summits to provide an overview of the changes to the validation process for regional and local contacts. In addition, the selected SLDS vendor will be required to develop a set of validation tools that will be made available to WVDE super users who can use these modules to ensure that the SLDS critical data elements are clean and validated. For more details, see Section B.2.3.

A.2.4 Interoperability

The system should use a common set of data elements with common data standards for comparing data among programs, such as the Common Education Data Standards, to facilitate data exchange among the WVDE, LEAs, and other entities.

Current System. From its inception, use of the state's integrated and common SIS solution has been required in all 57 LEAs. As such, interoperability of most data elements among schools, LEAs, and the WVDE has not been a critical issue. A common set of standards has been established for the data in the system and reported to the WVDE. In addition, the state submits data for federal reporting needs through EDFacts and participates in consortia with other states regarding common assessments and common content standards.

Limitations. Interoperability has risen in importance due to the need to incorporate data from various sources and vendors into the burgeoning P-20 data system. The different standards could lead to misinterpretations and inappropriate use of data for decision-making purposes.

Planned. The WVDE will develop and deploy processes to establish interoperability between the WVEIS and the new SLDS and among the SLDS and external systems. SLDS grant funds will allow the WVDE to hire and support an SLDS-SIS Programmer (1.0 FTE), who will build a sustainable interoperability framework between the WVEIS and the new SLDS. This staff person will be a point of contact between the SLDS vendor and the OIS staff and will help build the WVDE staff capacity regarding the new SLDS and its interactions with the WVEIS. As detailed in Section B.2.5, the WVDE also will build and maintain a comprehensive data model that provides a visual map of the interactions between the WVEIS and the SLDS. To address interoperability and exchange with external systems, the WVDE will develop a crosswalk of the critical data elements in the SLDS, aligning each with national education data standards. The alignment will be published in the data dictionary to help end users and external researchers understand how these elements can and cannot be used. In addition, the RFP for the SLDS Data Delivery Toolset will require potential vendors to specify how they will ensure a secure protocol for data export and exchange. For more details, see Section B.2.4.

A.2.5 Enterprise-Wide Architecture

An enterprise-wide data architecture links records across information systems and data elements across time, allowing for longitudinal analysis. The architecture should include unique student identifiers, a data dictionary, a data model, and business rules.

Current System. The unique statewide student identifier facilitates movement of records and tracking of students across districts as well as time. It includes records for all P-12 public school students, including those in state-operated schools, institutions, and correctional facilities, as well as for all collaborative preschool programs.

Limitations. By implementing the SLDS and its associated governance, the WVDE expects a much broader use of data to inform policy decisions and instructional practices while meeting the ever-growing demand for these data at the local, state, and national levels. This increased usage makes it more critical than ever for users and the WVDE to understand these data and their appropriate usage more fully. Despite the unique statewide student identifier, the WVDE

does not currently have either a comprehensive data dictionary for the WVEIS or a centralized data model to explain the data elements in the system or the linkages among the myriad relational database tables. Likewise, the WVDE does not have a unique teacher identification number, though this work is currently in progress. Only a few individuals are fully knowledgeable about this information, and, while some documentation exists, much of it is outdated, and other pieces are notably absent. As a result, even the LEAs that can access their own data rely primarily on the WVDE to analyze some data elements. This approach is problematic. If certain key individuals would retire from the WVDE, much of the institutional knowledge of the relationships in and content of the WVEIS would be lost. For this reason alone, this grant is critically important. Grant funding will help the WVDE build users' understanding about the data and build a formal structure that assigns long-term responsibility for maintaining and disseminating this information.

Planned. At the project's outset, the WVDE will begin developing a comprehensive data model to provide a visual reference of the WVEIS. The model will include a list of all data elements in each relational database and will map the linkages among tables. In addition, it will be updated via an iterative process with the SLDS vendor and the SLDS-SIS Programmer as the SLDS grows. This will ensure the model reflects the complex interactions between the WVEIS and the new SLDS. To the extent possible, this model will also clarify how the SLDS feeds required reports and exchanges with systems outside West Virginia. The model will be the focal point for the comprehensive SLDS data dictionary—the central repository for all information related to critical data elements. For more details, see Section B.2.5.

A.3. Needs for Goal 3: Promote Access to and Use of Data from the SLDS

A.3.1 Secure Access to Useful Data for Key Stakeholder Groups

A successful SLDS must effectively provide key stakeholder groups (e.g., policymakers, SEA program staff, external researchers, district administrators, school-level educators) with appropriate and secure access to data. This need for access must be balanced with a need to protect student privacy and confidentiality.

Current System. WoW, the WVEIS's end-user reporting system (see Section A.1.1), has partially addressed the need for teachers to access data in real time. WoW currently uses a single sign-on feature to screen credentials and maintain data security. The system allows teachers to interact with the WVEIS, view student data, and run various student reports.

Limitations. WoW currently provides teachers with access to student-level data only and requires a clear link among databases and among enrolled students and their associated teachers. The system does not provide the capability to generate custom reports or graphical displays of data. While this allows teachers to examine their students' data in their respective classrooms, it limits the functionality of data reporting for transient/traveling teachers, curriculum directors, school administrators, district staff, WVDE staff, and others without an associated student roster. In addition, it is impractical to provide these types of data to other stakeholders, such as parents and policy makers, who would benefit from this information. In today's data-driven culture, educators and administrators need greater and deeper access to data; however, without secure access, the types of available data will be extremely limited.

Planned. To address the need for access, the WVDE will develop an RFP that outlines specifications around single-user sign on and security. It is absolutely necessary for the WVDE to contract with an experienced vendor that can develop the hardware and SLDS programming/software and that can guide the WVDE's SLDS staff through the process; otherwise, access to anonymized data in real time will remain limited only to teachers who can make decisions on a local classroom-based level. For more details, see Section B.3.1.

A.3.2 Data Use Deliverables

An effective SLDS must be responsive to various users. Simply providing access to the data is insufficient to support effective system change and participant learning. The SLDS ultimately must drive decision making through tailored and flexible reporting, analysis, and visualization tools. In the initial design, the SLDS components must take into account multiple user inputs and evolving user needs.

Current System. Two data use deliverables serve the state's end users: WoW and DP-21 (see Section A.1.1). As noted, WoW is designed primarily for teacher-level access, entry, and data retrieval. DP-21 represents the WVDE's initial attempt to provide more real-time data access to school leadership teams, school, county, and state-level administrators.

Limitations. While WoW and DP-21 have made WVEIS data more accessible, they are not the types of dynamic interfaces that researchers, policy analysts, administrators, and teachers need. These tools provide static displays of data without any tailored analytics or visualizations. While the SLDS will present similar source data, it needs to be a more user-friendly system. For instance, interfaces personalized to various stakeholder groups would spark more interest among the state's users. Through enhanced access, users likely will have more productive conversations around student success and school improvement through data-driven decision making.

Planned. The vendor will create customized interfaces for each stakeholder group, aligned to the needs detailed in the Role Access Guidance document (see Section B.2.2). Each interface will (1) include reports that address the critical policy questions specific to each stakeholder group and (2) support data-driven decision making by eliminating the need to comb through superfluous data elements. These new data-analysis and visualization capabilities will be customized for each access level. For more details, see Section B.3.2.

A.3.3 Training on Use of Data Tools and Products

While the development of any tool is important, users must be able to use these tools without trepidation. As part of the SLDS rollout, the WVDE will include comprehensive trainings that prepare users to access the data tools and products.

Current System. WVDE's data access tools (e.g., WoW and DP-21) support enhanced access to the WVEIS data. Various WVDE offices (e.g., OIS, Assessment and Accountability, School Improvement, Title I, Research) have trained school, district, and state administrators to access data tools with a focus on school improvement. In addition, revisions are constantly being made to the systems with minor updates provided to end users on an ad hoc basis.

Limitations. Data-access trainings for the WoW and DP-21 are inconsistent, and the extent to which users can access either system varies widely. For instance, LEA decisions determine whether teachers have access to the WoW. The DP-21 interface was designed to support school improvement efforts from a systems perspective. As such, the access training has been directed toward school-, district-, and state-level administrators with an emphasis on school improvement and Title I schools. While both interfaces are widely available, the level of engagement has been less than optimal. Users need comprehensive and continued training to select the appropriate tools that allow them to interpret the data properly and to find answers to their critical policy and research questions.

Planned. The vendor will be required to develop a plan for providing general access and navigation training to WVDE's super users, WVDE program staff, and a pilot set of stakeholders from each role access group. The vendor also will archive the training materials and embed them within the SLDS solution to be accessible to all end users. In addition, grant funding will allow the WVDE to hire Curriculum Development Specialists (4.0 FTE) who will conduct professional development that focuses on data access. Without this funding, the WVDE would not be able to initiate this type of professional development. For more details, see Section B.3.3.

A.3.4 Professional Development on Data Use

An SLDS initiative also should enhance the *users'* capacity to interpret the data. This capacity building should be driven by a comprehensive professional development program that targets effective use of the data to inform decision making and to improve practices.

Current System. As noted in A.3.3, the OIS provides support on accessing WVEIS data; however, it does not offer professional development on interpreting or using the data to drive decision making. While the OIS also maintains the WoW and DP-21, professional development related to both is extremely limited and/or supported inconsistently by other offices.

Limitations. The focus on efficient data access rather than on effective data use conflicts with the WVDE's philosophy. From a data access and use perspective, the WVDE does not possess the capacity to ensure that WVEIS users understand fully how to interpret high-quality data for effective decision making. Professional development in this area is limited mostly to a handful of offices, which target only a small percentage of the state's schools. To shift the emphasis from data access to data use for decision making, the WVDE needs a unified platform that provides multileveled user access to a comprehensive set of data indicators.

Planned. In addition to the duties outlined in A.3.4, the Curriculum Development Specialists (4.0 FTE) will work with the WVDE to create a comprehensive professional development program, including a robust set of materials and a structure to support the application and interpretation of data to inform decision making. These staff members will then deploy a series of regional in-service trainings and archive the materials in a web-accessible format for the broader group of stakeholders. The Curriculum Development Specialists will also assist with continuous needs assessments, revisions to the training materials, and the identification of a core group of state and regional experts who will sustain the focus on data use and interpretation, rather than just data access. For more details, see Section B.3.4.

A.3.5 Evaluation of Data Products, Training, and Professional Development

The hallmark of an effective system reform is its ability to yield deliverables, training, and professional development programs that support system and individual improvement. A *well-designed evaluation will inform stakeholders about the system's effectiveness.*

Current System. The Office of Research, an independent agency within the WVDE, supports objective data-driven decision making, research-based planning, and funding compliance through focused reviews of research literature, needs assessments, trends analyses, and formative and summative program evaluations. As a clearinghouse for internal, external, and joint research and evaluation projects, it is a natural starting point for evaluating the SLDS effort.

Limitations. An effective evaluation must provide data to inform a program objectively throughout its life cycle and determine periodically whether the proposed outcomes are being met. This requires substantial time to monitor the program and meet with program directors, participants, users, and trainees. Despite the Office of Research's expertise, the eight-member staff is responsible for more than 40 distinct research and evaluation projects, in addition to support work for the Offices of Assessment and Accountability, Special Programs, Title I, and Healthy Schools. Given the extensive nature of the SLDS project, it is unlikely that the Office of Research could support a comprehensive formative and summative evaluation that meets stakeholders' needs. Without the SLDS grant, it is expected that any evaluation effort would be subpar and insufficiently informative.

Planned. To determine whether the SLDS (1) meets users' needs for data access, analytics, and reporting, and (2) enhances the capacity of users and the system to drive system reform, the Office of Research will first provide in-kind services to ensure that implementation milestones are tracked. Then, in Year 2 of the SLDS grant, the WVDE will hire an SLDS Evaluation Coordinator (.50 FTE) to design, implement, and report on the formative and summative evaluation of the SLDS. The evaluator will collaborate closely with the SLDS Project Manager, other SLDS staff, and data governance leaders to ensure that the SLDS's progress, successes, necessary revisions, and outcomes are identified and monitored. Without funding from this grant, the Office of Research would be able to support only ad hoc evaluation activities that do not effectively maximize the implementation fidelity or drive system improvements around data quality, access, and use. For more details, see B.3.5.

A.3.6 Partnerships with the Research Community

No organization functions in an entirely closed system. As the WVDE tries to enhance the transparency of its system and access to data, it is imperative that the state standardize processes and procedures for data requests, establish partnerships with research groups, and disseminate findings to the public while ensuring the confidentiality of individual student data.

Current System. Partnerships and collaboration with external researchers occur in an ad hoc manner depending on research needs. The Office of Research actively participates in national and international research conferences and, when possible, presents study findings in collaboration with other offices or research organizations. In addition, it publishes all reports and findings publicly and in compliance with federal and state privacy laws.

Limitations. The Office of Research is committed to conducting objective, valid, and reliable research to support the needs of the department and state; however, as a somewhat insulated research organization, the office has yet to establish a systematic process to share data or develop standardized data-sharing agreements, which are implemented only as needed. In addition, the office lacks a defined process for conducting external/joint research projects. Without a standardized method to promote joint research with external partners, the office tends to operate primarily through the limited perspective of the WVDE's needs. Working with only a minimal number of external researchers makes it difficult for the office to consider the vast array of potential research needs/critical policy questions that extend beyond the scope of the department or the state.

Planned. The WVDE is committed to making valid and reliable research available around policy, institutional, and instructional needs. This will occur only by enhancing the Office of Research's partnerships with the external research community. Through well-articulated data-use agreements, data-sharing guidelines, and external representation of SLDS research efforts, the Office of Research, SLDS Evaluation Coordinator, Data Governance Manager, and Data Governance Committee will ensure that a broader array of research interests are considered and that findings are disseminated to a more widespread audience. For more details, see B.3.6.

A.3.7 Sustainability Plan

Sustainability must extend beyond just maintaining the infrastructure and system itself. A sustainability plan must include a roadmap that helps sustain the deliverables and training to *ensure consistent user capacity to support the system's intended outcomes*.

Current System. The WVDE does not currently maintain a unified participant database, a comprehensive professional development plan for enhancing user capacity, or a means of tracking training and professional development. The Office of Research has tracked WVDE efforts around professional development as a whole but not broken down by data quality, access, and use.

Limitations. To ensure the long-term effectiveness of an SLDS or an SIS, technology training on accessing and querying data and professional development on appropriate data use (analysis, interpretation, and application) must be delivered with fidelity and consistency. Sustaining the training and professional development beyond the course of the grant is essential. In addition, a delivery tracking system is needed to avoid potential redundancies and a lack of focus in training development, delivery, and follow up. States often contend with how to support the use and roll-out of available technology systems. Without a sustainability plan, user capacity will decline through attrition.

Planned. The WVDE will promote continued data quality, access, and use by embedding a professional development sustainability plan within the SLDS sustainability roadmap. During the SLDS development project and beyond the scope of the grant, the WVDE will maintain participant databases and continue training key state and regional trainers, revising the SLDS support structure, and conducting regular needs assessments to ensure that the system constantly evolves to meet changing needs. For more details, see Section B.3.7.

B. Project Deliverables Related to System Requirements and Implementation

B.1. Project Activities for Goal 1: Establish SLDS Formal Governance and Policy Requirements

B.1.1. Define the Needs and Uses of the SLDS

This project's success hinges upon establishing the proper project management structure. As such, one of the first steps will be to **fill the positions of SLDS Project Manager, WVDE Data Governance Manager, and two SLDS Secretaries (Output 1.1a)**. The SLDS Project Manager (.50 FTE) will manage all aspects of the SLDS grant, including (1) tracking completion of key deliverables/outputs, (2) managing the project accounting, (3) overseeing the process for securing the necessary external contracts/RFPs to develop the SLDS components (e.g., Web development, reporting tools), (4) completing the required federal reporting, and (5) serving on the Data Governance Committee. For more details, see Section D.

The Data Governance Manager (1.0 FTE) will also play a key role in the success of the project and will work with the SLDS Project Manager on the project management team. This person will (1) establish, chair, and manage the work of the Data Governance Committee; (2) serve as the chief liaison between the Data Governance Committee and the Data Policy Committee; and (3) define and oversee the work of ad hoc Data Steward Task Teams, which will be responsible for the ground-level work related to critical data elements in the SLDS. This position, which will require the creation of a new job classification within the WVDE Office of Legal Services, will maintain a close, but neutral, relationship with the OIS. Toward the conclusion of the project, as part of the sustainability plan (See Section B.1.4), the WVDE will submit a request for state funds to support the Data Governance Manager position in perpetuity.

The Data Governance Manager's first task will be to **establish a comprehensive Data Governance Committee, consisting of key P-12 stakeholders and a set of defined Data Stewards from each contributing WVDE office and/or each regional/local education agency—all of which have diverse reporting needs (Output 1.1b)**. See Section D for a table of the committee's anticipated membership.

During Year 1, the Data Governance Manager will facilitate a series of monthly meetings with the Data Governance Committee to solidify the needs and uses of the SLDS from the outset. These meetings will **produce an SLDS mission statement (Output 1.1c)**, which will communicate that the SLDS will be the authoritative source for P-12 data. This mission statement will establish the guiding principles for the Data Governance Committee's work.

Concurrently, smaller subcommittees of the Data Governance Committee and Data Steward Task Teams (see Section B.1.2) will meet regularly during Year 1 to **develop a set of well-defined and agreed-upon critical research and policy questions that represent the interests of the state's P-12 stakeholders (Output 1.1d)**. The Data Stewards will submit lists of critical research/policy questions, emphasizing issues that address federal and state reporting requirements and essential data-based decision making among their constituencies. The Data Governance Manager will compile each task team's critical research/policy questions to help prioritize the critical data elements that must be included in the SLDS (see Section B.1.2).

B.1.2 Establish a Comprehensive Governance Structure for the SLDS

The Data Governance Committee will have the primary responsibility for determining the necessary SLDS governance structure; however, a three-level hierarchy of groups will contribute to its development: (1) Data Policy Committee, (2) Data Governance Committee, and (3) Data Steward Task Teams. The Data Governance Committee will leverage the resources from these three groups to accomplish the SLDS mission.

Figure 1. Hierarchy of Groups Involved in Developing Data Governance

- Composed of the Data Governance Manager and key decision makers in the WVDE, the legislature, and higher education, this committee will be consulted when the Data Governance Committee encounters policy or legal issues that need to be resolved
- Composed of the Data Governance Manager, Data Stewards in the WVDE, and local/regional education agencies, this group will represent the P-12 data owners and ensure that the SLDS meets all information and reporting needs
- Composed of Data Stewards and their staff, each team will complete a finite work scope—as defined by the Data Governance Committee—to resolve data issues in short time periods, teams will be assembled on an ad hoc basis and disbanded and reconstituted as necessary

To begin establishing a governance structure, the Data Governance Committee will take a comprehensive inventory of all available data elements and **develop a preliminary data directory with (1) all potential data elements in the WVEIS that may address policy questions, (2) elements required for federal reporting, and (3) the current calendar for collecting these elements (Output 1.2a)**. Smaller subcommittees of the Data Governance Committee and a series of ad hoc Data Steward Task Teams will accomplish this task.

An ongoing project of the Data Governance Committee will be to **develop and maintain an SLDS website that features all SLDS deliverables (Output 1.2b)**. This website will function as the public face of the SLDS project and eventually will house the vendor-developed SLDS solution and reporting tools (see Section B.2.3) and the professional development materials (see Sections B.3.3 and B.3.4). It also will include the SLDS mission statement, the critical research and policy questions, the data directory, and all business-rules documents.

B.1.3 Build Institutional Support for the SLDS

The WVDE will foster institutional support for the SLDS through various methods. First, the WVDE will **build unprecedented political support for the SLDS by establishing a Data**

Policy Committee (Output 1.3a), consisting of the State Superintendent of Schools, education committee members from the state House of Delegates and Senate, and representatives from the West Virginia Higher Education Policy Commission (in support of the burgeoning WV P-20 SLDS project). The Data Policy Committee's main purposes will be to **liaise with the Data Governance Manager and help the Data Governance Committee navigate the institutional and political barriers to accomplish the complex work of building the SLDS (Output 1.3b)**. The WVDE already has secured letters of support from many key players who have agreed to serve on this important committee (see Appendix B).

The project will **commit extraordinary internal resources in the form of WVDE staff, who will serve on the SLDS Data Governance Committee, the various Data Steward Task Teams, and an SLDS Steering Committee (Output 1.3c)**. The WVDE will commit time and resources across 25 offices in six divisions (see Appendix B for letters of support from the assistant superintendents in the selected LEAs). In addition, staff from the WVDE Offices of Information Systems, Research, Special Programs, and Assessment will commit time and resources to serve on the SLDS Steering Committee.

B.1.4 Establish a Sustainability Plan for the SLDS

It is essential that the SLDS project generate a sustainable product to maintain the benefits of the improved data system. In addition, since the SLDS will be West Virginia's authoritative education data system at the end of the grant period, it will be necessary for the state to commit fully to its continued development, including the ongoing integration of other data elements. As such, the WVDE will articulate each system component to ensure that additional elements can be integrated easily into the SLDS and that the system is flexible enough to address emerging research and policy questions on a continuing basis.

To emphasize the importance of this project to the state legislature and other potential sources of revenue, the WVDE will document the lessons learned from the SLDS implementation, demonstrating the anticipated improvements in data quality and operational efficiency. Sustainability also will be an ongoing point of emphasis during all conversations with policy makers. As such, SLDS sustainability will be a running agenda topic at all Data Policy Committee and other meetings throughout the grant period.

Early in the project, the WVDE also will document the operating costs of the current data system in terms of time and money and then compare these numbers with the estimated SLDS costs as the project proceeds. Calculating and disseminating the anticipated cost savings of the SLDS will help build public and legislative support to sustain the new system, including the new Data Governance Manager position. The Data Governance Committee, in conjunction with the Data Governance Manager and the appropriate Data Steward Task Teams, will **develop a sustainability roadmap, including a detailed process for (1) continuing revisions and maintaining the SLDS governance structure, (2) adding critical research/policy questions, and (3) validating and including associated critical data elements (Output 1.4a)**. The sustainability plan will include: (1) a realistic cost estimate of the staffing and budgetary requirements to maintain the SLDS and its associated features (e.g., training), (2) an estimate of the time and money saved due to the SLDS implementation, and (3) a detailed staffing plan indicating how time from existing WVDE staff will be redirected to support the new SLDS. The

sustainability plan will be disseminated through the SLDS website and presented formally to the Data Policy Committee and the state legislature. For more information regarding the sustainability plan, see Section B.3.7.

B.2. Project Activities for Goal 2: Address Technical Requirements Related to Key Data Elements in the SLDS

B.2.1 Establish Guidelines and Requirements for Inclusion of Data Elements That Address Federal Reporting Requirements

The Data Steward Task Teams will identify the final set of critical data elements that address the key research and policy questions compiled by the Data Governance Committee (see Section B.1.2). The task teams will ensure that the directory includes all data elements applicable to required ED Facts and other federal reporting. This will be accomplished by cross-walking each research/policy question and the relevant reporting requirements with the available data elements. The task teams will then **develop a list of critical data elements to be housed in a comprehensive SLDS data dictionary (Output 2.1.a)**.

The Data Governance Committee, with assistance from the Data Stewards, will develop the SLDS data dictionary iteratively throughout the project, beginning with the definition of the dictionary's scope and purpose. At the least, the final data dictionary will include the following information for each critical data element: (1) an agreed-upon definition, (2) collection source(s), (3) collection schedule, (4) alignment of the element to federal/state reporting requirements, (5) current business rules under which the data element is collected, (6) current validation criteria, and (7) alignment of the element to national education data standards. In addition, the data dictionary will align specific data elements with specific critical research/policy questions.

Early in the project, the WVDE will develop space on the SLDS website to house the data dictionary. As critical data elements are added to the SLDS throughout the project, the WVDE and SLDS vendor will publish new information to the dictionary. This resource will be particularly useful to researchers and to entities that provide technical assistance and professional development for LEAs, schools, and other educators.

B.2.2 Establish Guidelines and Requirements to Uphold Privacy Protection and Data Accessibility Rules

To protect privacy, the WVDE will **(1) develop a series of comprehensive non-disclosure agreements (NDAs) for each SLDS role access group, (2) carefully define role access groups and identify and deploy a secure mechanism for assigning access, (3) use a standardized and secure data warehouse and delivery toolset with established rules for data suppression and aggregation, and (4) create a standardized, but flexible, data-sharing agreement to be used with external researchers (Output 2.2a)**.

At the data model stage (see Section B.2.5), each data element in the WVEIS will, among other elements, have its privacy requirements identified as defined under FERPA, the Protection of Pupil Rights Amendment, and the Health Insurance Portability and Accountability Act (HIPAA). These privacy specifications will be used to develop a series of NDAs, which ultimately will be incorporated into the SLDS website; compliance with the NDAs will be a

prerequisite for access to the system. In addition, the privacy specifications for each critical data element in the SLDS eventually will be incorporated into the SLDS data dictionary.

All available SLDS role access groups and secure access methodologies for each group will be identified before the work begins. To accomplish this, the Data Governance Committee will build consensus around the stakeholder groups. The committee will make the ultimate decisions; however, at a minimum, these groups must include SEA and LEA staff, principals, educators, parents, external researchers, policy makers, and the general public. The committee also will broadly define the required level of access for each role group to meet its information needs. The committee will **compile the role definitions and access levels into a Role Access Guidance Document (Output 2.2b)**, which will be incorporated into the RFPs for the SLDS Data Delivery Toolset (see Output 3.1a). The successful vendor must provide a secure log-on solution that accommodates all role groups in the manner specified in the Role Access Guidance Document. To assure appropriate access levels for all stakeholders, the SLDS Data Delivery Toolset will be set up and secured based on user access roles. Users granted access to semi-identifiable or embargoed data will be required to sign an NDA.

The standardized data warehouse and secure SLDS Data Delivery Toolset are two broad steps that will help ensure privacy because all critical data elements will, to the extent possible, be anonymized prior to being available for visualization and export. In addition, any data elements that must retain identifiable qualities will be available only to trained users—all of whom will be bound by the NDAs. The Data Governance Committee also will establish rules for public reporting of data related to cell size and aggregation and will apply rules to SLDS reports to protect required confidentiality for all publicly reported data.

The SLDS also will provide external researchers and policy makers with data access, using tools and formats that protect personally identifiable aspects. The Data Governance Committee will create data-sharing agreements, which will **establish rules and procedures for responding to data requests from outside sources (Output 2.2c)**. At a minimum, those requesting data from the SLDS for research or other purposes must identify their principal investigator and co-investigators or collaborators; institutions represented by the request; objectives of the research; a detailed list of data elements requested and proposed analyses; and descriptions of the data storage and security measures employed by the institution. In addition, data use agreements will include enforceable provisions that clearly specify ownership of all data; ensure protections and non-disclosure of identifying information; require the destruction of data/information at the conclusion of research; preclude the use of data in any way except for statistics reporting and analysis related to the research objectives; and prohibit the release of data to any person who is not a member of the research team making the request.

These agreements will be standardized yet flexible enough to allow for customization of each research project. The agreements will guarantee that all information exported from the SLDS system for research meets rigorous privacy requirements. To develop these rules and procedures, the SLDS Steering Committee will generate the data-exchange rules for external researchers based on existing models. To reduce the potential for inappropriate use/disclosure of information, the data-sharing agreements will be posted on the SLDS website.

B.2.3 Develop Processes and Procedures to Ensure High Data Quality for Key Elements in the SLDS

The OIS staff will assist the Data Governance Committee members in targeting a set of transactional SIS fields, which will require validation because they provide the source data for the SLDS. The WVDE will establish a set of validation rules, which will be reviewed periodically and revised to assure the quality of these data. These rules will be enforced in the form of online real-time data edits during the submission process from the LEA. These edits will also serve as electronic certification of data submission to data quality.

Data Steward Task Teams, in consultation with the Data Governance Committee, will **establish a set of revised business rules for data entry, validation, collection, sharing, and reporting for each critical data element (Output 2.3.a)**. Funding from the grant will allow the WVDE to contract programming services (1.50 FTE), which will embed these rules into the electronic data collections from the SIS and on any Extract, Transform, and Load (ETL) process that may introduce data into the SLDS. Based on lessons learned to this point, the programmers will review and modify data input systems in the WVEIS to enforce the new set of business rules. They will update transactional data systems to enforce the business rules prior to loading data into the SLDS. While this process will require updates to existing data collection tools, it is critical to introduce these rules close to the data entry stage to assure the cleanest possible data for the SLDS. In addition, data elements will be aligned (to the extent possible) with national standards and will be designed to meet all federal reporting requirements. Training modules will be embedded into the transactional SIS (e.g., help screens) to build user capacity; this strategy should have a dramatic impact on data quality.

As an added step of quality control, the selected SLDS vendor will be required to **develop and implement review modules for Data Stewards to examine data submitted by LEAs for exceptions that may not have been remedied through enforcement of business rules and validation procedures (Output 2.3b)**. A set of super users from WVDE program offices will have access to these additional tools via the SLDS Data Delivery Toolset. These users will review data submitted by the LEAs to assure that all required elements have been addressed appropriately. The selected SLDS vendor will develop these tools, and the specifications will be included in the RFP (see Output 3.1a).

The WVDE will **deploy training for transactional users regarding the changes to the data validation process for the critical data elements (Output 2.3c)**. This will be provided in the form of a regional summit at each RESA where OIS staff will discuss changes to the validation process and the new training modules. These training resources will provide transactional users and consumers with a broad understanding of the data validation processes and implications for how the electronic validation tools should be used.

B.2.4 Ensure Interoperability between SLDS Elements and External Systems

To the greatest extent possible, data in the SLDS should be (a) aligned to national education data standards, (b) available for a seamless integration with external systems, (c) formatted to meet federal reporting requirements, and (d) transportable. These requirements will ensure that data are available to a wider audience and meet reporting demands. As such, the WVDE will initiate a process to align key data elements with national education data standards,

including the Common Education Data Standards. The WVDE will review current data mappings during the data model development stage (see Section B.2.5) to identify weaknesses and create new data mappings. These mappings will be incorporated into the SLDS when possible and clearly defined in the data dictionary.

The WVDE also will develop and implement methodologies and protocols to ensure the secure transfer of data among SLDS and external agencies. West Virginia currently uses the data submission processes provided by the U.S. Department of Education for EDFacts and CSPR submissions. Additionally, the SLDS will **provide electronic tools to ensure secure electronic data exchange within the WVDE and with other entities, such as researchers or outside vendors (Output 2.4a)**. As part of the RFP (see Output 3.1a), vendors must specify all protocols for exporting data using secure methodologies (e.g., Secure File Transport Protocol, Secure Shell). In addition, the data dictionary will consolidate and document the necessary data exchanges, consumers, and mapping in a single location. At the minimum, the data dictionary will include data-exchange methodologies, necessary field mappings, and a listing of items that are, or that are not, aligned with national education data standards. References to specific consumer usages will also be noted.

B.2.5 Enhance Current Enterprise-Wide Architecture

At the beginning of the project, the WVDE will **establish a fully described data model to guide the Data Governance Committee in developing the SLDS data dictionary (Output 2.5a)**. This model will define the scope of available data elements in the WVEIS and serve as a roadmap for the Data Governance Committee in developing both the data directory and the final SLDS data dictionary. The data model must describe not only the content of available data but the relationships among these data. This electronic model will be produced and maintained by OIS staff as data needs evolve. Once the critical policy/research questions, reporting requirements, and critical data elements begin to take shape, the WVDE will work with the SLDS vendor to build an updated data model that reflects the complex interactions between the WVEIS and the newly developed SLDS. It will be publicized on the SLDS website to build understanding of the new system.

B.3. Project Activities for Goal 3: Promote Access and Use of Data from the SLDS

B.3.1. Select an SLDS Solution That Supports Secure Access for All User Levels

The WVDE will contract with an information technology vendor, selected via a competitive RFP process to develop a turnkey SLDS solution that meets the clear specifications set forth by the Data Governance Committee. After completing the work, the vendor will turn the SLDS solution over to the WVDE in a ready-to-use condition, at which point the WVDE will be responsible for maintaining the system and training end users.

As such, the contracted services from the selected vendor will encompass the majority of the costs and effort associated with the project. The Data Governance Manager, Data Governance Committee, and the WVDE will **develop and disseminate an RFP to determine which potential vendors are best equipped to meet state demands and needs around an SLDS solution (Output 3.1.a)**. The relevant SLDS staff will first draft the RFP specifications (e.g., hardware, security). The completed RFP will be posted online, and SLDS staff will review

the submitted proposals. While the actual RFP will be written after the project begins, it will be aggregated broadly into three areas: (1) Software, (2) Hardware, and (3) Services.

Software. The project will have two critical software needs. First, a new software solution will be required to house the WVEIS critical data elements that align with the critical research/policy questions. The vendors' proposals likely will include a database solution, such as Oracle or Microsoft Structured Query Language (SQL) Server, which will provide database access and support standard SQL and Open DataBase Connectivity ODBC. The database solution will be accessible by the business intelligence applications described below. In their proposals, the potential vendors must include reasonable cost estimates to implement this work.

The vendor must also address a second software solution that overlays an appropriate set of data visualizations upon the SLDS warehouse and that employs a robust data export capability and a full suite of analysis tools for custom queries. The visualizations for these queries must be accessible to the public, including charts, graphs, and geographical displays of information in the SLDS. Most vendor proposals probably will include solutions similar to those in business intelligence platforms (e.g., IBMs Cognos). Regardless, the selected solution must allow end users to explore data trends in a safe and secure manner but with the ability to drill down, up, and through records at the state, LEA, school, classroom, and student levels.

The vendor must specify how the software licensing agreements will provide access to West Virginia's approximately 970 SEA staff, 1,140 LEA staff (estimate based on 20 users in each of the 57 LEAs), and 23,700 active teachers and administrators in 730 public schools. In addition, the solution must accommodate new licenses as the system and number of users grows.

Hardware. The vendor must assume all costs associated with the purchase, acquisition, and installation of hardware necessary to house the SLDS data. The WVDE anticipates this will require one database server with sufficient data storage to house the critical data elements over an existing 10-year data set while allowing for growth over time. This server will house the database solution and the necessary Exchange, Transform, and Load (ETL) tools to assist with transferring the current transactional data to the SLDS. The WVDE also anticipates a need for an application server to house the necessary hosting and business intelligence software to deploy the solution to the user community. The vendor must provide cost estimates for the purchase and site-based installation of all required hardware.

Services. Most of the vendor costs will be allocated to contracted services, primarily in the areas of software development and training—critical to the success of a turnkey solution.

Software development services will include those related to construction of the actual data warehouse and the development of the associated web-based access portal.

Construction of the warehouse will include constructing the necessary back-end infrastructure for the data and developing methods for linking and transforming the data from the WVEIS into an appropriate format that lends itself to the selected analysis toolset (e.g., OLAP cubes). Due to the complex interactions between the WVEIS and the SLDS, this work will require substantial collaboration between the vendor and the OIS to revise the existing

transactional data model. It will include integrating the interactive data dictionary and a set of milestones for loading the initial data into the SLDS, testing initial reports, and validating data.

The vendor's solution for the data access portal must also include a plan to utilize an online, secure log-on methodology for all SLDS users and a method for implementing role-based access requirements as described in the Role Access Guidance Document. As indicated, these users will include a group of WVDE super users who will be trained to create and publish reports for other role access groups, WVDE program staff, LEA staff, principals, teachers, parents, students, policy makers, and the general public.

The RFP will contain clear specifications, developed by the Data Governance Committee, that indicate the information and reporting needs of the various role access groups. In response to the RFP, the vendor must submit a detailed plan for developing a set of reports that meet each role access group's respective information needs and that address the primary critical research/policy questions formulated by the Data Governance Committee. The vendor also must develop report specifications, gain approval from the Data Governance Committee, and then build and test/validate each report throughout the life of the contract.

Training services, which will consume a substantial portion of the vendor's resources, will target the key end users. As part of the RFP response, the vendor must include a plan and schedule for accomplishing this work over the course of multiple sessions.

The vendor will train the super users on the selected software toolset, the database architecture behind it, and maintenance of the installed hardware. This will help ensure that once the vendor has completed the contract, WVDE staff members will be prepared to develop customized reports, load new data elements into the SLDS, and provide other maintenance.

The vendor must offer a comprehensive training program for WVDE employees, addressing access, navigation, and use of the associated reporting and analytic tools. These training events will be attended by the Curriculum Development Specialists and by program staff from all WVDE offices represented on the Data Governance Committee. The training will familiarize the staff with basic functions of the SLDS, including how to develop custom queries, data exports, and visualizations.

In addition, the vendor must deploy a set of additional web-based trainings to a pilot group of SLDS users from each user access group. These trainings will focus on navigation and use of the tools only. After concluding the pilot trainings, the vendor will revise and update the training based upon user feedback. The final products will be archived online in an interactive format to be deployed to end users. This will leave the WVDE with a set of training products and a protocol that can be used as a basis for deploying data access and data use training (see Sections B.3.3 and B.3.4). Depending on the selected toolset, the vendor may either develop new or use existing training materials; however, if existing materials and products are used, the vendor must demonstrate how they will meet the specific needs of the role access groups.

Once the RFP responses are scored, the Data Governance Manager and Data Governance Committee will select the winning application and work to **secure contracts for hardware and**

SLDS programming and/or software development (Output 3.1.b). The Data Governance Manager will work with the West Virginia Division of Purchasing to complete all necessary paperwork and obtain required signatures to meet all state procurement requirements.

B.3.2. Ensure That Deliverables Are Developed and Targeted toward the End Users' Needs as Specified in the Governance Documents

A key strategy will be to **build the SLDS web portal and web-based customized interfaces that allow multiple levels of end users to access the data efficiently (Output 3.2.a)**. To achieve this, the WVDE will pull SIS data elements that address key policy and research questions for specific stakeholder groups. Accomplishing this task will require a number of steps. First, to tailor each interface to a relevant stakeholder group (e.g., parents, students, teachers, administrators, legislature, researchers), the Data Steward Task Teams for data access and data usage will cross-walk the policy questions by stakeholder group, which will provide an initial framework for designing each group's reporting interfaces. After the reporting interfaces have been designed, the same Data Steward Task Team will propose reporting layouts for each level of end user within each stakeholder group to ensure that all policy questions have been fully addressed. To do so, the cross-walked data elements will be used to customize the layouts, analytics, and visualizations into a series of report specifications/schematics, which will guide the vendor in building each group's user interface.

Throughout the build process, the WVDE, Data Governance Manager, and Data Governance Committee will oversee the vendor's progress to ensure that deliverables are targeted toward the end users as specified in the governance documents. Once beta versions of the reports have been developed, they will be field-tested with representatives from each stakeholder group. The users' feedback about the interfaces and the associated analytics/visualizations will be folded into the deployed SLDS.

B.3.3. Establish and Implement a Technology Training Structure for Accessing and Using the Data Tools and Products

The vendor will be required to submit a proposal to **train key state and regional staff members (e.g., Data Governance Committee members, Data Governance Manager, OIS, SLDS Curriculum Development Specialists, RESA staff) to address the technical and logistical aspects of accessing the SLDS web portal (Output 3.3.a)**. The successful proposal must commit to multiple training sessions, continuing technical assistance, and follow-up training throughout the life of the contract.

In addition, the vendor must **develop or identify corresponding training documentation for the SLDS solution, which could include manuals, FAQs, troubleshooting tools, video modules, etc. (Output 3.3.b)**. This documentation must be available primarily in electronic formats and posted on the web portal; however, it should also appear in other formats (e.g., print, CDs/DVDs) as needed.

The vendor will be required to use these products to **establish a data access training program (Output 3.3.c)**, which will include an initial implementation schedule. The vendor must pilot this training with end users from each role access group—to be overseen by the Data Governance Manager, SLDS Project Manager, and Curriculum Development Specialists. The

vendor will then make revisions to the training materials based upon feedback on the pilot. The intent is to develop a refined set of training materials that detail access and navigation for each unique role access group. To sustain capacity building, the Curriculum Development Specialists will then use these resources in subsequent data access and data use (see B.3.4) trainings.

B.3.4. Establish and Implement a Professional Development Structure to Build User Capacity to Apply and Interpret Data to Inform Decision Making

The Curriculum Development Specialists, in consultation with Data Stewards, will **develop a professional development series that applies the information presented by the SLDS web tools and compile corresponding training guidance (manuals, FAQs and troubleshooting tools, video modules, etc.) (Output 3.4.a)**. The Curriculum Development Specialists will then use these resources to guide participants through a four-stage professional development model on using these data to drive educational decisions:

Stage 1 – Passive Observation: Participants will attend face-to-face trainings or view online/web trainings in a lecture-style format.

Stage 2 – Active Participation: Participants will apply lecture-style topics via hands-on exercises to access and use the web tools during the training and provide immediate feedback to the trainers.

Stage 3 – Peer Mentoring: Participants will be required to train others in their local areas on accessing and using the SLDS web tools.

Stage 4 – Implementation Progress and Learning: Participants will meet via teleconference at regularly scheduled intervals with the Data Steward Task Team for data access and use to report progress and to suggest potential revisions to the trainings.

Face-to-face regional meetings will be the primary professional development method, with the Curriculum Development Specialists providing training for key school, district, and state staff. These meetings will also promote a train-the-trainer and local-expert-user model. Online and web-based training materials will supplement local capacity building efforts, and, to promote the use of data, participants will be provided with temporary credentials for both the data access technology training and the data use professional development.

To support training and capacity building, the SLDS Curriculum Development Specialists, in consultation with WVDE staff, will **conduct needs assessments before, during, and after training sessions to identify objectives and users' learning needs and capacities related to databases, reporting tools, program concerns, and data-driven decision making (Output 3.4.b)**. Initially, the specialists will develop needs assessments and recruit end users from across the state to attend the trainings. They will then administer the assessments to the trainees and analyze the results. The Data Governance Manager, SLDS staff, and WVDE office staff will review the results and direct the specialists toward critical end-user training objectives and learning targets.

Using findings and interpretations from the needs assessment, the specialists will **establish a training program to build user capacity to interpret visualized data, arrive at substantive conclusions, and apply those conclusions appropriately in a data-driven decision making process (Output 3.4.c)**. As participants become more adept at data-driven

decision making, the needs assessments will be re-administered periodically to revise training objectives to meet the users' evolving needs and understandings of data use. In addition, the specialists will provide an overview of SLDS access and navigation (B.3.3) as part of the four-stage data use professional development process. To the extent possible, this training will leverage the resources developed by the SLDS vendor.

B.3.5. Establish a Process for Evaluating the Effectiveness of Data Tools and Related Professional Development

Initially, the SLDS project will use an implementation evaluation but employ a mixed-methods approach throughout and beyond the life of the grant. During the early stages, the evaluation will **develop a series of initial reports around pre-implementation milestones (Output 3.5.a)**, which will include, but not be limited to, developing a governance structure, assigning a Data Governance Manager, selecting the Data Governance Committee and other personnel, identifying critical policy questions and data elements, developing the SLDS website and an RFP, and formulating an initial sustainability roadmap framework. The Office of Research will address these issues until an SLDS Evaluation Coordinator can be selected.

The next evaluation phase will be to assign an SLDS Evaluation Coordinator (.50 FTE), who will be supported with SLDS funds to **develop a detailed SLDS evaluation design (Output 3.5.b)**. The Data Governance Manager and a Data Steward Task Team will finalize the job description that sets forth the minimum for the SLDS formative and summative evaluations (see Appendix C for draft job description). Once selected, the evaluator will propose an evaluation design to the Data Governance Manager and Data Governance Committee for approval. This framework will guide the evaluation of the SLDS program implementation and outcomes (e.g., user capacity, system capacity, data use culture, relevant distal student outcomes indirectly affected by data-driven decision making).

In addition, the SLDS Project Manager will **track and document the accomplishment of RFP milestones (Output 3.5.c)** throughout the process. These milestones will include, but not be limited to, the writing and posting of the RFP for developing the SLDS web portal, timely review of applications and awarding of contracts, and vendor progress in meeting SLDS deliverables (e.g., user interfaces, customized layouts, analytics, visualizations). As the system develops toward the testing and deployment stages, the evaluator will track the piloting and revision processes and the timely deployment of the SLDS in final form. The Data Governance Manager will receive periodic updates and documentation on the project's progress.

Subsequently, the evaluation will **track outputs and assess the capacity building outcomes related to the data access technology training and data use professional development (Output 3.5.d)**. Key outputs will include, but not be limited to, the development of training and professional development guidance (e.g., documents, websites, video modules, and manuals) and training session scheduling, duration, participation, and completion. The evaluator will track the training implementation by developing and cross-referencing a participant training database with the delivery schedule. The focus of the outcome assessment will be twofold: (1) participant and end-user capacity and (2) system capacity and change.

Integral components related to the professional development outcome evaluation design will include (1) the needs assessment findings of user capacities with regard to accessing and querying web-based data systems and (2) the users' pre-professional development knowledge, skills, and abilities with regard to data analysis, interpretation, and application in decision making. As such, an important aspect of the evaluation will be the degree of alignment between user needs and training and the professional development content and delivery. In a related theme, the outcome evaluation also will **employ observations, focus groups/interviews, surveys, and data portal usage statistics to assess trainer and participant reactions and opinions to the trainings/professional development opportunities, participants' learning of content and acquisition of relevant skills and knowledge, impact of the training on shifting the users' mindset toward using data for decision making, the frequency and quality with which participants use data and apply requisite skills/knowledge, and the impact of participants' application of data/skills relative to their respective interests and needs (Output 3.5.e).**

B.3.6. Establish Policies to Ensure Effective Internal and External Partnerships with the Research Community

Through the SLDS, the WVDE will leverage more opportunities for data access and sharing and, in the process, establish more consistent and ongoing internal and external research partnerships. Based on the confidentiality safeguards outlined in Section B.2.2, the WVDE will **ensure that the education research community is sufficiently represented throughout the SLDS planning and implementation (Output 3.6.a).** This may include researchers from in-state higher education institutions (e.g., Marshall University, West Virginia University), the private sector, and the public/nonprofit sector—all of these entities will be represented on the Data Governance Committee.

The external research members of the Data Governance Committee will be selected through a multistep process that can be replicated later in the case of member attrition. The Data Governance Manager, in consultation with the Data Policy Committee and Data Governance Committee, will first identify key research entities (e.g., institutions of higher education, private- and public-sector research organizations) whose interests should be represented. In addition, the WVDE will solicit interest from other research organizations and, in coordination with the Data Governance Manager, define a recruitment process that allows organizations to nominate individuals to serve. A rolling representation of nominated researchers will be selected and assigned to the Data Governance Committee to ensure diverse and dynamic external interests.

B.3.7. Establish a Sustainability Plan for Data Access Tools, Processes, and Training

The WVDE will **build user capacity during the SLDS development and continue training efforts beyond the scope of this project (Output 3.7.a).** The first area of focus will be to ensure that the training materials (e.g., documentation, guidance, FAQs, webinars) are available on the SLDS website, or via multimedia software if requested, and are continuously revised to reflect best practices. The SLDS Curriculum Development Specialists, SLDS-SIS Programmer, SLDS Secretaries, and Data Governance Manager will develop and sustain a help-desk throughout the life of the grant. Beyond the grant, it is expected that the super users and other sustained positions will provide help-desk support.

In addition, the Data Governance Committee, in conjunction with the Data Governance Manager and the specialists, will develop a professional development sustainability plan within the sustainability roadmap. Its focus will be to train users and to build their capacity, which shall include maintenance, reviews, revisions, or support materials for data access, processes, and training. The WVDE also will maintain state-, regional-, and local-level databases to ensure a critical mass of users receive information on accessing, applying, and interpreting the SLDS data. State-level and regionally based training teams will undergo continuous education around the SLDS web tools and infrastructure to build their skills as the platform and system expand.

In support of the sustainability plan, the Data Governance Manager and Data Governance Committee, SLDS Secretaries, and SLDS Evaluation Coordinator will continually assess user and system-level needs to inform revisions to the SLDS. These will include documenting and implementing changes to data/infrastructural requirements, revising critical policy questions, responding to changes in end-user needs, and continuing training for new users of the system.

C. Timeline for Project Deliverables

The deliverables, milestones, and outcomes will be achieved collaboratively by the WVDE, Data Governance Committee, Data Policy Committee, Data Steward Task Teams, other SLDS staff, and the SLDS vendor in accordance with the timeline below, which provides dates for initiating and completing the associated tasks. The roles and responsibilities of the various parties identified in the timeline are further described in the Section D: Project Management and Governance. See Appendix A for a comprehensive Gantt chart with additional task-level details.

Table 1. Timeline for Project Deliverables

Deliverables, Milestones, Outcomes	Responsible Parties	Outputs/Tasks	Start	End
Goal 1: Establish SLDS Formal Governance and Policy Requirements				
1.1 Define the needs and uses of the SLDS	WVDE	1.1a Fill the positions of SLDS Project Manager, Data Governance Manager, and SLDS Secretaries (2)	May-12	Aug-12
	Data Governance Manager, Project Manager	1.1b Establish a comprehensive Data Governance Committee, consisting of key P-12 stakeholders and a set of defined Data Stewards from each contributing WVDE office and/or each regional/local education agency—all of which have diverse reporting needs	Aug-12	Sep-12
	Project Manager, Data Governance Manager, Data Governance Committee	1.1c Produce an SLDS mission statement	Sep-12	Jan-13

Deliverables, Milestones, Outcomes	Responsible Parties	Outputs/Tasks	Start	End
	Project Manager, Data Governance Committee, Data Steward Task Teams	1.1d Develop a set of well-defined and agreed-upon critical research and policy questions that represent the interests of the state's P-12 stakeholders	Sep-12	Jan-13
1.2 Establish a comprehensive governance structure for the SLDS	Project Manager, Data Governance Committee, Data Steward Task Teams	1.2a Develop a preliminary data directory with (1) all potential data elements in the WVEIS that may address policy questions, (2) elements required for federal reporting, and (3) the current calendar for collecting these elements	Sep-12	Feb-13
	Project Manager, Data Governance Committee	1.2b Develop and maintain an SLDS website that features all SLDS deliverables	May-12	Apr-15
1.3 Build institutional support for the SLDS	WVDE	1.3a Build unprecedented political support for the SLDS by establishing a Data Policy Committee	May-12	Apr-15
	Data Policy Committee	1.3b Liaise with the Data Governance Manager and help the Data Governance Committee navigate the institutional and political barriers to accomplish the complex work of building the SLDS	May-12	Apr-15
	WVDE	1.3c Commit extraordinary internal resources in the form of WVDE staff, who will serve on the SLDS Data Governance Committee, the various Data Steward Task Teams, and an SLDS Steering Committee	May-12	Apr-15
1.4 Establish a sustainability plan for the SLDS	Project Manager, Data Governance Committee, Data Governance Manager, Data Steward Task Teams	1.4a Develop a sustainability roadmap, including a detailed process for (1) continuing revisions and maintaining the SLDS governance structure, (2) adding critical research/policy questions, and (3) validating and including associated critical data elements	May-12	Apr-15
Goal 2: Address Technical Requirements Related to Key Data Elements in the SLDS				
2.1 Establish	Project Manager, Data	2.1a Develop a list of critical data	May-12	Apr-15

Deliverables, Milestones, Outcomes	Responsible Parties	Outputs/Tasks	Start	End
guidelines and requirements for inclusion of data elements that address federal reporting requirements	Governance Committee, Data Steward Task Teams	elements to be housed in a comprehensive SLDS data dictionary		
2.2 Establish Guidelines and Requirements to Uphold Privacy Protection and Data Accessibility Rules	Project Manager, WVDE	2.2.a (1) Develop a series of comprehensive non-disclosure agreements (NDAs) for each SLDS role access group, (2) carefully define role access groups and identify and deploy a secure mechanism for assigning access, (3) use a standardized and secure data warehouse and delivery toolset with established rules for data suppression and aggregation, and (4) create a standardized, but flexible, data-sharing agreement to be used with external researchers	May-12	Apr-15
	Project Manager, Data Governance Committee	2.2.b Compile the role definitions and access levels into a Role Access Guidance Document	Sep-12	Jan-13
	Project Manager, Data Governance Committee	2.2.c Establish rules and procedures for responding to data requests from outside sources	Dec-13	Apr-14
2.3 Develop processes and procedures to ensure high data quality for key elements in the SLDS	Project Manager, Data Steward Task Teams, Data Governance Committee, SLDS vendor	2.3.a Establish a set of revised business rules for data entry, validation, collection, sharing, and reporting for each critical data element	Oct-12	Apr-15
	SLDS vendor, Project Manager	2.3 b Develop and implement review modules for Data Stewards to examine data submitted by LEAs for exceptions that may not have been remedied through enforcement of business rules and validation procedures	Jan-13	Mar-13
	WVDE	2.3.c Deploy training for	Feb-13	Apr-15

Deliverables, Milestones, Outcomes	Responsible Parties	Outputs/Tasks	Start	End
		transactional users regarding the changes to the data validation process for the critical data elements		
2.4 Ensure interoperability between SLDS elements and external systems	SLDS vendor, Project Manager	2.4.a Provide electronic tools to ensure secure electronic data exchange within the WVDE and with other entities, such as researchers or outside vendors	Sep-12	Dec-13
2.5 Enhance current enterprise-wide architecture	Project Manager, WVDE	2.5.a Establish a fully described data model to guide the Data Governance Committee in developing the SLDS data dictionary	May-12	Apr-15
Goal 3: Promote Access and Use of Data from the SLDS				
3.1 Select an SLDS solution that supports secure access for all user levels of the SLDS	Project Manager, Data Governance Manager, Data Governance Committee, and WVDE	3.1.a Develop and disseminate an RFP to determine which potential vendors are best equipped to meet state demands and needs around an SLDS solution	Sep-12	Apr-13
	Project Manager, Data Governance Manager, Data Governance Committee	3.1.b Secure contracts for hardware and SLDS programming and/or software development	Apr-13	May-13
3.2 Ensure that deliverables are developed and targeted toward the end users' needs as specified in the governance documents	Project Manager, WVDE, SLDS vendor, Data Governance Manager, Data Governance Committee, Data Steward Task Teams	3.2.a Build the SLDS web portal and web-based customized interfaces that allow multiple levels of end users to access the data efficiently	Jan-13	Dec-13
3.3 Establish and implement a technology training structure for accessing and	SLDS vendor, Project Manager, WVDE, RESA, Data Governance Committee, Data Governance Manager,	3.3.a Train key state and regional staff members (e.g., Data Governance Committee members, Data Governance Manager, OIS, SLDS Curriculum Development Specialists, RESA staff) to address	Sep-13	Dec-13

Deliverables, Milestones, Outcomes	Responsible Parties	Outputs/Tasks	Start	End
using the data tools and products	Curriculum Development Specialists, Data Steward Task Teams	the technical and logistical aspects of accessing the SLDS web portal		
	SLDS vendor, Project Manager, WVDE, Data Governance Manager	3.3.b Develop or identify corresponding training documentation for the SLDS solution, which could include manuals, FAQs, troubleshooting tools, video modules, etc.	Jun-13	Dec-13
	SLDS vendor, Project Manager, Data Governance Manager, SLDS Project Manager, Curriculum Development Specialists	3.3.c Establish a data access training program	May-14	Sep-14
3.4 Establish and implement a professional development structure to build user capacity to apply and interpret data to inform decision making	Project Manager, Data Steward Task Teams, Curriculum Development Specialists	3.4.a Develop a professional development series that applies the information presented by the SLDS web tools and compile corresponding training guidance (manuals, FAQs and troubleshooting tools, video modules, etc.)	May-13	Dec-13
	Curriculum Development Specialists	3.4.b Conduct needs assessments before, during, and after training sessions to identify objectives and users' learning needs and capacities related to databases, reporting tools, program concerns, and data-driven decision making	Nov-13	Jul-14
	Curriculum Development Specialists	3.4 c Establish a training program to build user capacity to interpret visualized data, arrive at substantive conclusions, and apply those conclusions appropriately in	May-14	Apr-15

Deliverables, Milestones, Outcomes	Responsible Parties	Outputs/Tasks	Start	End
		a data-driven decision making process		
3.5 Establish a process for evaluating the effectiveness of data tools and related professional development	Project Manager, WVDE	3.5.a Develop a series of initial reports around pre-implementation milestones	May-12	Apr-13
	SLDS Evaluation Coordinator	3.5.b Develop a detailed SLDS evaluation design	Feb-13	Jun-13
	Project Manager	3.5.c Track and document the accomplishment of RFP milestones	May-13	Apr-15
	SLDS Evaluation Coordinator	3.5.d Track outputs and assess the capacity building outcomes related to the data access technology training and data use professional development	May-14	Apr-15
	SLDS Evaluation Coordinator	3.5e Employ observations, focus groups/interviews, surveys, and data portal usage statistics to assess trainer and participant reactions and opinions to the trainings/professional development opportunities, participants' learning of content and acquisition of relevant skills and knowledge, impact of the training on shifting the users' mindset toward using data for decision making, the frequency and quality with which participants use data and apply requisite skills/knowledge, and the impact of participants' application of data/skills relative to their respective interests and needs	May-14	Apr-15
3.6 Establish policies to ensure effective internal and external partnerships	WVDE, Data Governance Committee, Data Policy Committee	3.6.a Ensure that the education research community is sufficiently represented throughout the SLDS planning and implementation	May-12	Apr-13

Deliverables, Milestones, Outcomes	Responsible Parties	Outputs/Tasks	Start	End
with the research community				
3.7 Establish a sustainability plan for data access tools, processes, and training	Project Manager, WVDE, Data Governance Manager, Data Governance Committee, Data Steward Task Teams, Curriculum Development Specialists, SLDS Evaluation Coordinator, SLDS Secretaries	3.7.a Build user capacity during the SLDS development and continue training efforts beyond the scope of this project	May-14	Apr-15

D. Project Management and Governance Plan

West Virginia has a history of supporting and following through on large education projects. This is evidenced by the state’s support for the WVEIS as a common SIS, the unique student identifier, the P-20 longitudinal data partnership, the WoW, and DP-21. The P-12 SLDS project, which will reside in and be managed by the WVDE, will benefit from this robust educational data infrastructure and fervent support from the legislature.

To succeed, this project’s myriad activities require rich collaborations among multiple state agencies and within the WVDE. This type of project can be accomplished only by holding it to high standards of project management and by implementing a clear governance structure that removes obstacles and that encourages the stakeholders to participate actively.

Governance

As noted in Section B.1.2, the WVDE will establish a three-level hierarchical governance structure for the SLDS project, featuring the following:

1. The **Data Policy Committee** will be an interagency group of the state’s key education decision makers who can impact potential legal and/or policy barriers to the project. It will meet at least quarterly and additionally as needed (as determined by the Data Governance Committee). Key members will include the following (see Appendix C for their resumes):

Table 2. Data Policy Committee Membership

Representative Group	Person	Role
West Virginia P-12 SLDS	TBD	Data Governance Manager
WVDE	Jorea M. Marple, Ed.D.	State Superintendent of Schools

WVDE	Marshall Patton	Executive Director, WVDE Office of Information Systems
WVDE	Sherri Goodman	Staff Attorney, WVDE Office of Legal Services
West Virginia Senate	Senator Robert H. Plymale	Chair, Senate Education and Education Accountability Interim Committees
West Virginia House of Delegates	David Mohr	Consultant to Education
West Virginia House of Delegates	Delegate Mary M. Poling	Chair, House Education and Education Accountability Committees
West Virginia Higher Education Policy Commission	Rob Anderson	Interim Executive Vice Chancellor for Administration

2. The **Data Governance Committee** will include representatives from each of the six WVDE divisions, three LEAs, and one RESA, with additional membership to be determined on an ad hoc basis. It will meet at least monthly throughout the project to define the direction of the SLDS. Except for the SLDS project staff, all committee members will provide their time as an in-kind service. The preliminary membership will be as follows (see Appendix C for resumes):

Table 3. Data Governance Committee Membership

Representative Group	Person	Role
SLDS Project Staff	TBD	Data Governance Manager
SLDS Project Staff	Sara Kitts	SLDS Project Manager
WVDE – State Superintendent of Schools	Chuck Heinlein	Deputy Superintendent of Schools
WVDE – State Superintendent of Schools/Division of Curriculum and Instruction	Robert Hull	Associate Superintendent of Schools
WVDE – Division of Educator Quality and System Support	Amelia Courts	Assistant Superintendent
WVDE – Division of Student Support Services	Joe Panetta	Assistant Superintendent
WVDE – Division of Technical, Adult, and Institutional Education	Kathy D’Antoni	Assistant Superintendent
WVDE – Office of Information Systems	Marshall Patton	Executive Director
WVDE – Office of Assessment and Accountability	Juan D’Brot	Executive Director
WVDE – Office of Research	Nate Hixson	Assistant Director
LEA - Putnam County Schools	Dawn Gessel	Coordinator of Information Systems
LEA - Cabell County Schools	Jeremy Baisden	Coordinator of Information Systems
LEA - Wood County Schools	Robert Matthews	Director of Management Information Systems and Technology
RESA	TBD	TBD

3. The Data Governance Committee, in consultation with the Data Governance Manager, will have the authority to establish ad hoc **Data Steward Task Teams**, which will focus on various topics (e.g., data access, data usage, research) related to the critical data elements. The teams will be composed primarily of WVDE staff members, who will provide their time as an in-kind service. Membership will be determined by the Data Governance Manager. The teams will meet as needed to accomplish their work scopes.

The WVDE will also establish an **SLDS Steering Committee**, which will guide the project in technical aspects of operation. This group will include key staff from the WVDE Offices of Assessment, Research, Special Programs, and Information Systems who possess institutional knowledge regarding the critical data elements. These staff members will work closely with the Data Governance Committee to share their knowledge, help determine the appropriate uses of the data, and implement appropriate privacy protocols to protect human subjects when data are shared with external research agencies. This group will also provide critical advice in the development of data-exchange procedures and agreements. The membership is as follows (see Appendix C for resumes):

Table 4. SLDS Steering Committee Membership

Representative Group	Person	Role
WVDE – Office of Information Systems	Marshall Patton	Executive Director
WVDE – Office of Assessment and Accountability	Juan D’Brot	Executive Director
WVDE – Office of Research	Nate Hixson	Assistant Director
WVDE – Office of Information Systems	Randall Kirk	Assistant Director
WVDE – Office of Special Programs	Sandy McQuain	Assistant Director
WVDE – Office of Information Systems	Malinda Shanklin	Coordinator

Project Management

Responsibility for project management will reside within the WVDE. The SLDS Project Manager and the Data Governance Manager will direct the project using the WVDE Workplan, an internal web-based project management tool that tracks collaboration among staff, as well as additional task-level project management software. This team will hold regular grant management team meetings to update the SLDS project management plan and to track progress on tasks. The team will oversee the work assigned to the SLDS vendor with particular scrutiny. The contract itself will be developed in a way that ties each payment to the successful completion of key deliverables/milestones. The Data Governance Manager and Project Manager will hold regular progress meetings with the vendor and will have the authority to determine what constitutes successful completion. A variety of staff funded by the project will support day-to-day management (see Appendix C for resumes or job descriptions for all):

The **Data Governance Manager**, housed in the WVDE Office of Legal Services, will be a focal point of the SLDS project. This individual will guarantee that the WVDE has a focused and respectful dialogue with the state’s P-12 stakeholders regarding the mission, needs and uses of the new SLDS. The Data Governance Manager will serve as chair of the newly formed Data Governance Committee and as the chief liaison between the Data Governance Committee and Data Policy Committee. His or her role in the latter capacity will be particularly important for initiating and maintaining the sustainability dialogue with West Virginia’s education leaders.

Because of this person's knowledge of the needs and uses of the SLDS, the Data Governance Manager also will assist the Project Manager in supervising and managing the project, developing the RFP, and selecting the final SLDS vendor. As manager of the Data Governance Committee, this person will play a critical role in gaining support from WVDE staff and in establishing the Data Steward Task Teams and work scopes necessary to address the quality of the critical data elements. This individual will also ensure that the professional development structure meets the stakeholders' needs. See Appendix C for the job description.

The **SLDS Project Manager** position (.50 FTE) will be filled by Sara Kitts of the OIS. The WVDE has selected an internal employee to ensure the project has a ground-level manager from day one—prior to hiring the Data Governance Manager, after which the project management will become a shared responsibility. The SLDS Project Manager will track key milestones and project activities, keep financial records, and coordinate all required federal reporting. Ms. Kitts will help coordinate the efforts of other SLDS staff, including the SLDS Secretaries, Evaluation Coordinator, Curriculum Development Specialists, SLDS-SIS Programmer, and the contracted programming staff. The SLDS Steering Committee will assist her in these duties. Her primary focus will be to manage the substantial contract between the WVDE and the SLDS vendor. Because the success of this project hinges upon the quality of this work, Ms. Kitts will meet regularly with and track the vendor's progress. The Data Governance Manager and Project Manager must review and sign off on each vendor deliverable.

Two **SLDS Secretaries** will be supported with SLDS funds. One will be housed in the OIS and tasked with supporting the Data Governance Manager, SLDS Project Manager, Curriculum Development Specialists, and SLDS-SIS Programmer. By extension, this individual will also organize and help facilitate the Data Governance Committee and Data Policy Committee meetings. The other secretarial position will be housed in the WVDE Office of Research and will support the SLDS Evaluation Coordinator in managing the project formative and summative evaluations. These staff members will process all required travel for SLDS staff, provide all secretarial support for the project, secure required meeting spaces, prepare project materials, and acquire any miscellaneous supplies needed for the project.

The **SLDS Evaluation Coordinator** (.50 FTE) will conduct the formative and summative evaluations of the project. This person will be housed within the WVDE Office of Research and use the office's project management software (e.g., smartsheets) but will also use the WVDE Workplan and report regularly to the SLDS Project Manager and Data Governance Manager. This individual will have access to other research and evaluation coordinators and to a WVDE Research Writer as an in-kind support network. His or her primary role will be to develop and implement an effective project evaluation, formally documenting the completion of milestones and determining the extent to which the professional development builds user capacity to apply the information from the SLDS to make effective educational decisions.

Four **SLDS Curriculum Development Specialists** will be housed within the OIS. They will coordinate the professional development that helps regional/local/school staff use the SLDS to drive instructional and school-improvement decisions. They will liaise with WVDE program staff members who are knowledgeable of the data elements within the SLDS and build a series of modules for using these elements. These individuals will provide the Project Manager with

detailed plans for delivering professional development and provide the SLDS Evaluation Coordinator with logs of the training and technical assistance provided throughout the project. Based on the needs assessments, they will also ensure that the final set of professional development materials are targeted toward specific end users' needs. They will also provide all field-based regional training, including a primer on data access and navigation. As such, these individuals are critical to the success of the project.

The **SLDS-SIS Programmer** will be housed within the OIS and will aid with the necessary programming tasks to bridge the gap between the WVEIS and the new SLDS. Since this individual must be knowledgeable of the SLDS vendor's proposed software solutions, he or she will play a critical role as the bridge between the vendor and the WVDE. The SLDS-SIS Programmer will spend considerable time building capacity among OIS staff members, ensuring that they can use and maintain the new system and its associated hardware. This individual will be trained by the vendor and will help develop the SLDS data model.

E. Staffing

Resumes or job descriptions for all the following are included in Appendix C. Justifications for staff needs are included in the Budget Narrative.

WVDE SLDS Project Staff (In-Kind)

As an in-kind contribution, WVDE staff will bring data together from existing systems, align current and future critical policy questions to data, and address compliance with existing state and federal legislation and policies. In addition, the staff will continue to support this work after the initial grant period has ended. The following staff also will contribute substantial amounts of time to the project as Data Stewards or by serving on the SLDS Steering Committee and/or Data Governance Committee:

Marshall Patton, Executive Director, OIS, will dedicate approximately .10 FTE to the project. He has primary oversight for all WVDE information systems initiatives, including transactional data systems used by LEAs. He will serve on the Data Governance Committee and Data Policy Commission and will work closely with the SLDS Steering Committee, Data Governance Manager, and SLDS Project Manager.

Randall Kirk, Assistant Director, OIS, will dedicate approximately .10 FTE to the project. He is responsible for internal software development and database design. He will be an integration specialist for the SLDS and will serve on the Data Governance Committee and the SLDS Steering Committee.

Malinda Shanklin, Coordinator, OIS, will dedicate approximately .10 FTE to the project. She serves as the WVDE's EdFacts Coordinator and has more than 20 years of experience with West Virginia's SIS. She will be a database content specialist for the SLDS and serve on the SLDS Steering Committee. She will also play an integral role with creating the data model and the data dictionary.

Nate Hixson, Assistant Director, Office of Research, will dedicate approximately .05 FTE to the project. He is a lead researcher and currently oversees research projects for the WVDE. He will be a research needs specialist for the SLDS and serve on the Data Governance Committee and the SLDS Steering Committee.

Juan D'Brot, Executive Director, Office of Assessment, will dedicate approximately .05 FTE to the project. He oversees all statewide assessment initiatives. He will be a content and reporting advisor for the SLDS and serve on the Data Governance Committee and the SLDS Steering Committee.

Sherri Goodman, Staff Attorney, Office of Legal Services, will dedicate approximately .05 FTE to the project. She has served as the WVDE's legal counsel during the state's P-20 longitudinal data system project and will serve in a similar capacity for the P-12 SLDS. In addition, she will serve in an advisory role to the Data Governance Manager and the Data Policy Committee.

OIS Programming Staff will contribute additional programming resources as needed to integrate the SLDS extraction with the state's existing administrative information system. While these staff members will vary throughout the scope of the project, it is estimated that a minimum of 1.0 FTE will be devoted to this purpose.

Grant-Funded SLDS Staff

The **Data Governance Manager** (1.0 FTE) will oversee all aspects of data governance for the project, including the establishment and chairing of vital committees. This person must (1) hold a bachelor's degree or higher in an education-related field, with a master's degree preferred; (2) understand and be able to navigate the state's political system; and (3) have demonstrated successes in administrating large and/or statewide projects. This person also should have a certificate in project management and/or credentials in IBM iSeries, RPG, DB2/400, ColdFusion, SQL, and Microsoft Office preferred.

SLDS Project Manager Sara Kitts, Coordinator, OIS, will be assigned to SLDS project management at .50 FTE. She is an excellent choice for this position due to her experience with current OIS projects and with project management. Sara has been with the WVDE for four years. Her role has been as a Data Coordinator responsible for many state and federal reporting projects, including the West Virginia Report Cards. She is well versed in the WVDE databases in both the IBM iSeries and Microsoft SQL Server platforms. Additionally, she has software development experience in both the IBM iSeries (WVEIS) and ColdFusion platforms. She has demonstrated strong organizational skills and documents her work systematically. Prior to her employment with the WVDE, she was a developer with direct involvement in the project management/life-cycle work for a large benefits administration firm. She has data mapping experience and served on an electronic data interchange compliance team. Her degree is in strategic leadership.

Two **SLDS Secretaries** (2.0 FTE) will provide focused support for the SLDS project and associated program evaluation. The successful applicant(s) must have at least five years of administrative experience, preferably in education or research organizations. Their duties will

include assisting with general administration of the grant program, evaluating the project, staffing the help desk, and coordinating meetings of various groups. They must be proficient in operating modern office equipment and word processing/spreadsheet software (e.g., Microsoft Office) and have experience with managing office records and essential accounting.

Four SLDS Curriculum Development Specialists (4.0 FTE) will assist the WVDE program offices in developing the professional development on using SLDS data to improve instruction and to drive decision making. They also will deploy professional development to regional/local education agency staff, principals, teachers, and other members of the public. They must (1) hold a bachelor's degree in an education-related field or have five years of experience in other related fields, with a master's degree preferred; (2) have experience working in systems or school improvement; (3) demonstrate an ability to make information accessible to the public; and (4) possess strong technology and presentation skills. Experience with educational data systems or other large organizational data systems is preferred.

The **SLDS Evaluation Coordinator** (.50 FTE) will conduct formative and summative program evaluations for the projects and serve on the Data Governance Committee. This individual must (1) possess a master's degree or related experience in education, science, research, statistics or related field; (2) have experience in conducting various statistical analyses of both qualitative and quantitative information; and (3) be able to protect the research participants' privacy and to produce high-quality and accessible reports.

The **SLDS-SIS Programmer** (1.0 FTE) will assist contracted program staff in building real-time edits for local transactional SIS users to ensure data quality. This person must (1) possess a bachelor's degree from an accredited college or university in computer science, mathematics, or related field, and (2) have experience as a programmer, data analyst, or database administrator. Previous experience with business intelligence tools, such as IBM Cognos or Business Objects, and with IBM iSeries, RPG, DB2/400, ColdFusion, SQL, and MicroSoft Excel is preferred.

Contractual Staff

The OIS Executive Director will identify and contract with programming staff at .375 FTE in Year 1, .75 FTE in Year 2, and .375 FTE in Year 3 (1.50 total FTE). These programmers will integrate the changes to business rules for data entry, validation, collection, sharing, and reporting for each critical data element. In addition, these programmers will validate edits from LEA submissions and help develop associated professional development materials to be integrated into the transactional SIS.

Other Attachment File(s)

* Mandatory Other Attachment Filename:

To add more "Other Attachment" attachments, please use the attachment buttons below.

ID	Deliverable/Activity/Task/Actions	2012				2013				2014				2015				2016				2017		
		Q4	Q1	Q2	Q3	Q4	Q1	Q2																
1	Development of a Comprehensive State Longitudinal Data System for WV Public Schools																							
2	Deliverable 1: Establish SLDS Formal Governance and Policy Requirements																							
3	1.1 Define the needs and uses of the SLDS																							
4	1.1a Fill the positions of SLDS Project Manager, Data Governance Manager, and 2 SLDS Secretaries.																							
5	Develop position codes, job descriptions and release																							
6	Hire candidates																							
7	1.1b Establishment of a Comprehensive Data Governance Committee.																							
8	Finalize Governance committee membership																							
9	Convene initial governance committee meeting and establish schedule for																							
10	Convene a Monthly Data Governance Committee meeting																							
11	Publicize membership of governance committee																							
12	1.1c Produce an SLDS mission statement																							
13	Develop an agreed upon mission statement and a set of associated goals for the SLDS																							
14	Publish mission statement via SLDS website																							
15	1.1d Develop a set of well-defined, agreed-upon critical research and policy questions that represent the interests of the state's P-12																							

ID	Deliverable/Activity/Task/Actions	2012				2013				2014				2015				2016				2017		
		Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
26	Consult with Data Governance Committee to plan Webspace components			Project Manager																				
27	Build initial Webspace for SLDS			Project Manager																				
28	SLDS Mission Statement, Critical Research and Policy Questions, Data Directory, MOUs, and business rules, published via SLDS Website																							
29	Maintain and provide continuous content updates to SLDS Website																							
30	1.3 Build institutional support for the SLDS																							
31	1.3a Build unprecedented political support for the SLDS by establishing a Data Policy Committee.																							
32	Establish Data Policy Committee																							
33	Meetings held as needed (quarterly) to discuss barriers/facilitators to implementation of SLDS																							
34	1.3b Liaise with the Data Governance Manager and help the Data Governance Committee navigate the institutional and political barriers to accomplish the complex work of building the SLDS.																							
35	1.3c Commit extraordinary internal resources in the form of WVDE staff, who will serve on the SLDS Data Governance Committee, the various Data Steward Task Teams, and an SLDS Steering Committee.																							

ID	Deliverable/Activity/Task/Actions	2012				2013				2014				2015				2016				2017	
		Q4	Q1	Q2	Q3	Q4	Q1	Q2															
36	As noted in 1.1d, identify a set of data stewards from each WVDE program office who shall commit time to serve on Data Governance Committee and work on Data Steward Task Teams charged with enforcing data quality throughout the course of the SLDS																						
37	Commit time and resources from Office of Information Systems, Research, and Assessment to sit on an SLDS steering committee to guide the work of the project.																						
38	1.4 Establish a sustainability plan for the SLDS																						
39	1.4a Develop a sustainability roadmap, including a process for (1) continuing revisions/maintenance of the SLDS governance structure, (2) adding critical research/policy questions, and (3) validating and including associated critical data elements.																						
40	Initiate and maintain an ongoing sustainability dialog with the Data Policy Committee regarding the SLDS																						
41	Estimate the cost savings and efficiency savings.																						
42	Present and publish preliminary sustainability plan																						
43	Deliverable 2: Address Technical Requirements Related to Key Data Elements																						
44	2.1 Establish guidelines and requirements for inclusion of data elements that address federal reporting requirements																						

ID	Deliverable/Activity/Task/Actions	2012				2013				2014				2015				2016				2017			
		Q4	Q1	Q2	Q3	Q4	Q1	Q2																	
45	2.1a Develop a list of critical data elements to be housed in a comprehensive SLDS data dictionary.																								
46	Define scope and purpose of data dictionary to include at minimum (1) the definitions, (2) source(s) (3) collection schedules, (4) alignment to federal/state reporting requirements, (5) current business rules,																								
47	Define scope and purpose of data dictionary to include at minimum (6) current validation criteria for each critical data element, and (7) alignment of each element to national education data standards.																								
48	Write definitions, document sources, etc. for critical data elements. Add elements as necessary throughout																								
49	Produce an online framework within the SLDS portal to house the data																								
50	Publish information about critical data elements to data dictionary																								
51	2.2 Establish guidelines and requirements to uphold privacy																								
52	2.2.a Develop a series of comprehensive non-disclosure agreements (NDAs) for each SLDS role access group.																								
53	Define protected data elements during data model development																								
54	Determine methods for protecting data elements (e.g., specifying user access, exclusion of PII, anonymization, etc.)																								
55	Incorporate privacy specifications into data dictionary																								

ID	Deliverable/Activity/Task/Actions	2012				2013				2014				2015				2016				2017							
		Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2					
69	Conduct periodic reviews of recommended edits to business rules and validation procedures for critical data elements and repeat cycle as					[Hatched Bar] SLDS Vendor																							
70	2.3 b Develop and implement review modules for Data Stewards to examine data submitted by LEAs for exceptions that may not have been remedied through enforcement of business rules and validation procedures.					[Solid Black Bar]																							
71	Identify target data elements for review									[Hatched Bar] Project Manager																			
72	Build review modules									[Hatched Bar] SLDS Vendor																			
73	Assign modules to appropriate role access groups									[Hatched Bar] SLDS Vendor																			
74	2.3.c Deploy training for transactional users regarding the changes to the data validation process for the critical data elements.					[Solid Black Bar]																							
75	Conduct face to face summit with regional/local contacts regarding validation process.									[Hatched Bar] WVDE																			
76	Regional/local trainers build capacity among transactional users to ensure data quality.									[Hatched Bar] RESA,LEA																			
77	Develop online modules and embed modules within transactional system (e.g., help screens)									[Hatched Bar] WVDE																			
78	2.4 Ensure interoperability between SLDS elements and external systems					[Solid Black Bar]																							
79	2.4.a Provide electronic tools to ensure secure data exchange within the WVDE and with other entities.					[Solid Black Bar]																							
80	Identify systems and education data standards with which the SLDS will interface/support data exchange									[Hatched Bar] Project Manager																			

ID	Deliverable/Activity/Task/Actions	2012				2013				2014				2015				2016				2017			
		Q4	Q1	Q2	Q3	Q4	Q1	Q2																	
81	Develop and put into practice methodologies and protocols to ensure the secure transfer of data within the SEA, between the SLDS and the SEA, and among external agencies (e.g., secure FTP, SSH, etc.)																								
82	Initial load of critical data elements into SLDS																								
83	2.5 Enhance current enterprise-wide architecture																								
84	2.5.a Establish a fully described data model to guide the Data Governance Committee in developing the SLDS data dictionary.																								
85	Take inventory of data elements in the current transactional SIS																								
86	Define linkages between data elements/tables.																								
87	Produce data model and share with Data Governance Committee																								
88	Conduct periodic reviews of data model to culminate in a comprehensive data model for the																								
89	Deliverable 3: Promote Access and Use of Data from SLDS																								
90	3.1 Select an SLDS solution that supports secure access for all user levels of the SLDS																								
91	3.1.a Develop and disseminate an RFP to determine which potential vendors are best equipped to meet state demands and needs around an SLDS solution.																								
92	Draft RFP/RFQ specifications (hardware, security, etc.);																								

ID	Deliverable/Activity/Task/Actions	2012				2013				2014				2015				2016				2017	
		Q4	Q1	Q2	Q3	Q4	Q1																
93	Post RFP/RFQ and accept applications:																						
94	Review and Score applications																						
95	3.1.b Secure contracts for hardware and SLDS programming/software development.																						
96	Develop documentation and award contract in accordance with state procurement requirements.																						
97	3.2 Ensure that deliverables are developed and targeted toward the end-users needs as specified in governance documents.																						
98	3.2.a Build the SLDS web portal and web-based customized interfaces that allow multiple levels of end users to access the data efficiently.																						
99	Document cross-walking stakeholder groups and relevant policy questions																						
100	Develop framework for each user interface (Use to identify potential analytics/visualizations required)																						
101	Completed user interfaces (Select/Build/Field Test/Revise reports, visualizations, and analytics for each stakeholder group)																						
102	Hire an SLDS-SIS Programmer																						
103	Provide continuous interface and reporting modifications to promote communication between SLDS and SIS and to ensure SLDS reports meet user needs																						
104	3.3 Establish and implement a technology training structure for accessing and using the data tools and products.																						

ID	Deliverable/Activity/Task/Actions	2012				2013				2014				2015				2016				2017		
		Q4	Q1	Q2	Q3	Q4	Q1	Q2																
105	3.3.a Train key state and regional staff members to address the technical and logistical aspects of accessing the SLDS web portal																							
106	Conduct trainings, provide follow-up, Q&A and ongoing technical assistance																							
107	3.3.b Develop or identify corresponding training documentation for the SLDS solution, which could include manuals, FAQs, troubleshooting tools, video modules, etc.																							
108	Identify existing or develop Data Access training materials for selected Post tutorials/documentation for data access training materials on SLDS Website																							
109																								
110	3.3.c Establish a data access training program																							
111	Implement a formal data access training and validation process																							
112	3.4 Establish and implement a professional development structure to apply and interpret data to inform decision-making.																							
113	3.4.a Develop a professional development series that applies the information presented by the SLDS web tools and compile corresponding																							
114	Hire 4 SLDS Curriculum Development Specialists to Provide Data use professional development																							
115	Develop Data Use training materials for selected tool set																							
116	Post tutorials/documentation for data use training materials on SLDS																							

ID	Deliverable/Activity/Task/Actions	2012				2013				2014				2015				2016				2017		
		Q4	Q1	Q2	Q3	Q4	Q1	Q2																
117	3.4.b Conduct needs assessments to identify objectives and users' learning needs and capacities related to databases, reporting tools, program concerns, and and data-driven decision making																							
118	Identify and recruit End-user trainees																							
119	Develop and administer Needs Assessment																							
120	Interpret NA results																							
121	Collaborate with DGM and SLDS Staff to develop on end-user training																							
122	3.4.c Establish a training program to build user capacity to interpret visualized data, arrive at substantive conclusions, and apply those conclusions appropriately in a data-driven decision making process																							
123	Develop and implement a formal data use professional development plan																							
124	Post data access training materials and documentation on the SLDS Website																							
125	3.5 Establish a process of evaluating effectiveness of data tools and related professional development																							
126	3.5.a Develop a series of initial reports around pre-implementation milestone																							
127	In Year 1 this will be provided in-kind by WVDE OR in the form of documentation of initial milestones																							
128	3.5.b Develop a detailed SLDS evaluation design																							
129	Develop job description and post vacancy announcement.																							
130	Hire candidate																							

ID	Deliverable/Activity/Task/Actions	2012				2013				2014				2015				2016				2017	
		Q4	Q1	Q2	Q3	Q4	Q1																
131	Completion of Evaluation proposal and submission to DGC																						
132	3.5.c Track and document the accomplishment of RFP milestones																						
133	Documentation of implementation milestones and deliverables; RFP development; SLDS Development Contract awarded; SLDS Data Warehouse, reporting and visualization tools developed and piloted; Training/PD conducted and evaluated																						
134	3.5.d Track outputs and assess the capacity building outcomes related to the data access technology training and data use professional development																						
135	Track implementation of training/PD program and develop participant																						
136	Develop/administer data use PD																						
137	Evaluation surveys to assess participant reactions and learning																						
138	3.5.e Employ observations, focus groups/interviews, surveys, and data portal usage statistics to assess Training/PD outcomes																						
139	Develop/administer follow-up surveys, focus groups, and observations to assess participant use of SLDS (data-driven planning and Develop/administer Data Use PD Evaluation surveys to assess SLDS impacts (data use culture, academic outcomes, systemic efficiencies, cost savings, etc.)																						

ID	Deliverable/Activity/Task/Actions	2012				2013				2014				2015				2016				2017		
		Q4	Q1	Q2	Q3	Q4	Q1	Q2																
140	3.6 Establish policies to ensure effective partnerships with the internal and external partnerships with the research community.			█																				
141	3.6.a Ensure that the education research community is sufficiently represented throughout the SLDS planning and implementation			█																				
142	Identify and solicit interest among key research organizations or entities			█																				
143	Recruit and assign members			█																				
144	3.7 Establish a sustainability plan for data access tools, processes, and training									█														
145	3.7.a Build user capacity during the SLDS development and continue training efforts beyond the scope of this project.									█														
146	Continuously revise and maintain training materials											█												
147	Sustain a series of regional/local help desks											█												
148	Maintain current training participant databases											█												
149	Continuous education delivered to SLDS staff											█												
150	Continual need assessments for users and system.											█												

There was a problem attaching a file(s).

The attached file can be viewed as an individual component using Application Log menu option.

Marshall Patton

(b)(6)

Objective

A leadership position in which I may use my skills and those of my team members in a way that provides quality information and services to my customers/employer. I have spent twenty years developing skills and hope to continue learning in the future. I enjoy being involved with current technologies and look forward to what those technologies will be in the future. I have a deep love of problem solving and enjoy a challenge.

Education

West Virginia State University/Marshall University

Regents Bachelor of Arts, May 2011

National Institute of Technology

Computer programming curriculum including RPG, COBOL, BASIC, and Business Mathematics. 1987

Poca High School

General Studies. Computer Science and AutoCAD courses from Putnam County Vocational Center, (b)(6)

Skills

Applications

WVEIS Applications, MS Office products and similar, Help Systems Sequel, IBM Query, Crystal Reports, Adobe Development Suite, Adobe Acrobat

Platforms

IBM iSeries, Microsoft Windows, Linux, Macintosh

Languages/Database Related

RPG, PHP, CL, SQL, ODBC, ASP, SQL Server, DB2/400, JDBC, SSH

Work Experience

West Virginia Department of Education, Charleston, WV

Executive Director, Information Systems

2010-Present

- Director of all Information Systems projects for both internal and Local Education Agency data initiatives.
- Management of Information Systems budget for WVDE administrative data systems.
- Direct supervision of all Information Systems development and support staff (approximately 25).
- Management of Information Systems contracted service providers.
- Oversee the development and maintenance of all new and existing data systems projects for the WVDE.
- Serve as Information Systems representative on WVDE cabinet.
- Serve as WVDE's representative on national data system discussions and committees.

West Virginia Department of Education, Charleston, WV

Manager, WVEIS

1993-2010

- Originally hired as support lead for the student information data system of the West Virginia Education Information System (WVEIS). Began working with programming staff and regional computer center staff in a leadership role. I am currently responsible for providing support to our Regional Computer Centers, overseeing programming staff, designing data collection and reporting standards.
- Served as part of the West Virginia Department of Education management and leadership team.
- WVEIS running over a Wide Area Network consisting of circuits running IP with some SNA encapsulated. This network consists of nearly 900 locations including three IBM iSeries platforms, approximately 7000 personal computers, and over 15,000 users. I am currently the primary contact for all issues related to the AS/400s and data collections.
- Providing technical support to regional and county level staff for hardware and software components of the WVEIS system.
- Work closely with programming staff to develop new RPG applications and correct existing program flaws.
- Development of data collection and reporting standards for state and federal reporting requirements.
- Work as part of a team to develop Internet and Intranet applications.
- Develop ad-hoc reports from data collected through WVEIS.
- Develop and provide training to regional support center staff as well as end users.
- Coordination and management of development efforts for moving WVEIS applications to Internet technologies.
- Serve as project lead and management for WVDE and RESA staff of approximately 30 members.
- Participate in state and national data initiatives to help develop reporting and data sharing standards and best practices.
- Work with Higher Education Policy Commission to develop data sharing and standards for exchange such as the recent PK-20 initiatives. Including but not limited to the electronic exchange of high school transcripts with higher education.

YBIL Web Design, Eleanor, WV

**Owner
2003-2009**

- Owner of small business designing web sites and web based database front ends. Projects include a customer base of small to mid-size businesses and organizations as well as online marketing and sales.
- Primarily developing in PHP with a MySQL backend database.
- Site development including all programming work, server maintenance, graphics design, and database management.
- Approximately 20 clients

Regional Education Service Agency II, Huntington, WV

**WVEIS Technician/Trainer
1991-1993**

- Hired as a technician to support the West Virginia Education Information System. This is a project which connects all West Virginia schools and County Board Offices to a regional AS/400 for administrative student management, payroll, and financial applications.
- Personally involved with connecting remote locations to the RESA II AS/400, providing technical support and troubleshooting network and personal computer problems.
- Began support of software applications and AS/400 systems management and security implementations.
- Provided training for county and school level staff.
- Accepted a position with the WV Department of Education within the same project in March of 1993.

**National Roofcoaters/A1 Rental, St. Albans, WV
Programmer
1989-1991**

- RPG Programmer on System 36 using Screen Design Aid, Interactive Data Definition Utility, SEU, etc. Worked extensively with Local Data Areas, 3812 printer support, and financial and business applications development.
- Additionally installed and support a rental company management software application running in a Texas Instrument Zenix environment.

**MicroAge Computer Stores, Charleston, WV
Hardware Service Technician
1986-1989**

- Provided technical assistance, troubleshooting, and repair services for IBM, AT&T, Apple, and Compaq Personal Computer products and peripherals.

Adult Education Instructor

- Development and instruction of basic computer knowledge, word processing, database management, spreadsheet, and Internet utilization courses for both Kanawha County Schools and Putnam County Schools Adult Education programs.

Affiliations/Activities

- Current voting member of WV State Government's Information Technology Council.
- Current SEA representative on National Forum on Education Statistics.
- Current member of the Education Information Management Advisory Consortium, a committee of the Council of Chief State School Officers.
- Past member of the Accountability Systems and Reporting subgroup of the Council of Chief State School Officers SCASS organization.
- National Center for Educational Statistics Fellows Program – 1997.
- UNITE Users Group Board Member – 1999.
- Appalachian AS/400 Users Group Vice-President – 1998.

Randall L. Kirk

(b)(6)

Objective

A leadership position that will both utilize and further the organizational and development skills acquired in over 30 years of diverse and demanding experiences.

Employment

Assistant Director/Coordinator / Webmaster /
Programmer Analyst
West Virginia Department of Education
Office of Information Systems

December 1999 – Present
Charleston, West Virginia 25305

- Support educational finance operations with development, maintenance, and generation of applications and/or reporting systems for public, federal, internal, and district consumption such as "Warrants/Transmittals", "Project Financial Reports", and "ARRA Reporting".
- Support strategic planning efforts at the state, district, and school level with internally developed applications such as the "Five Year Strategic Plan" and "WVDE Work Plan".
- Support student achievement efforts with development of applications such as the "Online IEP".
- Support teacher quality initiatives with development of applications such as "Highly Qualified Teachers Collection" and "Effective Educators".
- Support the development of computer applications from inception by user to delivered product by utilizing resources in the AS/400 midrange, Web Based, or mainframe environments.
- Develop and support databases in IBM DB2, Microsoft SQL Server, or mainframe SAS.

Part Time Instructor
West Virginia Employee Development Center

November 1996 – November 1999
Charleston, West Virginia 25305

- Provided introductory computer and software applications training

Programmer Analyst II / Programmer Analyst
West Virginia Bureau of Employment Programs
Research, Information, and Analysis

February 1990 – November 1999
Charleston, West Virginia 25305

- Designed, coded, and documented mainframe and microcomputer systems for producing industry, occupational, and other state economic data
- Utilized Dbase, FoxPro, Excel, COBOL, SAS and other programming solutions to produce answers to inquiries from public and governing entities

Audit Clerk II / Clerk III
West Virginia Department of Health and Human
Resources
Child Advocate Bureau

April 1987 – January 1990
Charleston, West Virginia 25305

- Identified and posted child support payments from absent parents to custodial parents
- Calculated and distributed disbursements due to custodial parents after evaluating any existing arrearages or obligations

Clerk III / Clerk I
West Virginia Department of Motor Vehicles
International Registration Program

November 1984 - April 1987
Charleston, West Virginia 25305

- Reviewed and issued commercial vehicle titling/registrations under the International Registration Plan agreement

- Reviewed and approved salvage/reconstructed vehicle titling

Radio Communications Analyst
 United States Air Force
 National Security Agency
 Defense Special Missile and Astronautic Center

May 1981 – October 1984
 Fort George G Meade, Maryland 20755

- Supported mission of assigned agency

Education

Associate in Applied Science Computer Science
 West Virginia State College
Graduated with honors.

January 1985 – May 1991
 Institute, West Virginia 25112

Anne Arundel Community College

Spring 1982
 Arnold, Maryland 21012

Community College of the Air Force
 Communications Processing Management

May 1982 – October 1984
 Maxwell AFB, AL 36112

Radio Communications Analysis
 United States Air Force Technical Training
 School
Honor graduate.

November 1980 – May 1981
 Goodfellow AFB, San Angelo Texas 76908

West Virginia Institute of Technology

Spring 1980
 Montgomery, West Virginia 25136

East Bank High School
Diploma

(b)(6)

Skills

Proficient with Coldfusion
 Proficient with Microsoft SQL Server database design and operations
 Proficient with Microsoft Excel
 Proficient with Microsoft Word
 Proficient with TSO JCL
 Proficient with SAS, Vision/Results
 Proficient with COBOL and CICS COBOL
 Proficient with HTML and CSS
 Proficient with Fusebox framework for Coldfusion applications
 Practical experience with DB2 queries and Surveyor 400
 Practical experience documenting systems/data structures for users and technology staff
 Practical experience providing training to a variety of audiences
 Developing knowledge for the Fusebox Lifecycle Process
 Developing knowledge for Adobe LiveCycle PDF utilization
 Practical experience developing XML data structures
 Skilled with ad-hoc queries in many environments
 Quick Learner

Malinda Shanklin

(b)(6)

Education

December 2011 Masters of Science in Technology Management
Minor in Information Systems
Marshall Graduate School
South Charleston, WV
Cumulative GPA 4.00

May 2003 Regents Bachelor of Arts
West Virginia State College
Institute, WV

Work History

I. West Virginia Department of Education
Office of Information Systems
1900 Kanawha Blvd. E
Charleston, West Virginia
Coordinator WVEIS Student Products/EDFacts
May 15, 2003 - Current

A. Job Responsibilities

1. Provide support for the West Virginia Education Information System (WVEIS)
2. Develop training and seminar materials
3. Maintain telephone support
4. Conduct special projects as assigned
5. Work with various divisions and departments to fulfill data and reporting needs
6. Perform data quality checks on data collections and work with district staff to ensure the reporting of quality data in a timely manner for state and federal reporting
7. Work with various WVDE personnel to ensure congruency of data

8. Develop support documentation for WVEIS
9. Work with Higher Education Policy Commission (HEPC) in developing and populating a Statewide P-20 Longitudinal Education Data System (P-20 SLED)
10. Participate in the Shared Learning Collaborative (SLC) with the WV DHHR office and WV Supreme Court of Appeals

B. Job Activities

1. Provide workshops for small groups and/or individuals as needed to develop, update and enhance their skills in using the software available.
2. Provide telephone support relating to WVEIS products
3. Coordinate with contracted staff to ensure the reporting of quality and timely data for USED requirements.
4. Provide data reporting for in-house requests
5. Interface with USED Partner Support Center concerning data quality questions and issues
6. Participate in state and national conferences concerning the collection and reporting of data relating to public education.
7. Work with other employees within the department to collect, verify and report information relating to public education.

II. Regional Education Service Agency III (RESA III)

Dunbar, West Virginia

Coordinator of Technical Services

February 1991 – May 15, 2003

A. Job Responsibilities

1. Manage the West Virginia Education Information System (WVEIS)
2. Develop training and seminar materials
3. Provide group and individual training
4. Maintain a telephone support desk
5. Conduct special projects as assigned
6. Maintain monthly and annual reports
7. Maintain and update telephone, voice mail and paging systems
8. Supervise the computer repair shop and technicians
9. Order and maintain computer repair shop parts inventory
10. Develop and implement statewide disaster recovery procedures

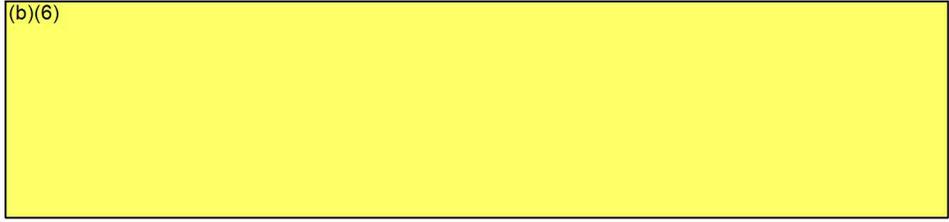
B. Job Activities

Page 2 of 3

1. Supervise and coordinate the state wide WVEIS computer system, (WVEIS is a legislative mandated comprehensive, integrative computer system for county school systems, using two AS/400 computers with a statewide telecommunications system)
2. Work with designated county personnel to coordinate the installation and updating of equipment at new or existing locations to be used with WVEIS.
3. Work with designated county coordinators to plan staff development for county personnel on using the AS/400, custom programs developed by and provided by the West Virginia Department of Education (WVDE) and the Comprehensive Information Management for Schools (CIMS) software.
4. Provide workshops for small groups and/or individuals at their location or in the RESA III training lab as needed to develop, update and enhance their skills in using the software available.
5. Provide telephone support with software, hardware and communication questions and problems.
6. Coordinate the WVEIS computer system for the entire state of West Virginia.
7. Work with school personnel to pre-print scan forms for grading and scheduling and scan completed forms into the system.
8. Use IBM Interactive Data Definition Utility (IDDU), Data File Utility (DFU), Query and NewGeneration Software (NGS) Interactive Query (IQ) on the AS/400 to create, maintain and print reports from data files for in house departments, schools and county boards of education.
9. Maintain accurate records for reporting to the RESA III Board of Directors, to the West Virginia Department of Education (WVDE), and to the West Virginia Legislature.
10. Maintain the Definity Telephone System, the Intuity Audix Voice Messaging System and the Call Accounting System (CAS)
11. Process Purchase orders for needed supplies for the AS/400 and computer repair shop.

Nathaniel K. Hixson

(b)(6)



Education

<i>Master of Arts</i> Major: Communication Studies:	West Virginia University Concentration: Theory and Research	<i>June, 2006</i>
<i>Bachelor of Arts</i> Major: Communication Studies:	West Virginia University Concentration: Applied Studies	<i>May, 2005</i>

Employment

10/10 – Present **Assistant Director** – West Virginia Department of Education Office of Research, Charleston, West Virginia

The assistant director manages a team of research and evaluation coordinators in the development and completion of research and evaluation projects for the West Virginia Department of Education. The assistant director is responsible for the day-to-day operations of the office of research including managing internal, external, and joint research and evaluation projects, developing proposals and presenting results of research studies to internal and external audiences. The assistant director proposes and carries out research and evaluation studies to meet the information needs of the West Virginia State Board of Education and the State Superintendent of Schools.

07/09 – 09/10 **Coordinator – Research and Evaluation**, West Virginia Department of Education Office of Assessment, Accountability and Research, Charleston, West Virginia

The research and evaluation coordinator conducts both small scale and large scale formative and summative research and evaluation projects for the West Virginia Department of Education. The coordinator conceptualizes and plans high quality research and evaluation studies that involve multiple stakeholder groups; utilizes appropriate sampling techniques to ensure research findings adequately address specific research and evaluation questions; conducts a variety of basic and complex statistical analyses of quantitative data, demonstrating superior skills with data analysis software (i.e., SAS, SPSS); conducts appropriate analyses of a broad array of qualitative data collected via multiple methods; and communicates research and evaluation findings to a range of audiences including policy makers, educators, and the general public.

- 04/07 – 07/09 **Research and Evaluation Specialist I**, Edvantia, Inc., Charleston, West Virginia
- The research and evaluation specialist conducts qualitative and quantitative data collection and statistical analysis, develops comprehensive research and evaluation reports, designs instruments to address research and evaluation questions, and creates and manages databases for qualitative and quantitative data. Duties included providing research and evaluation services for multiple projects. Served on Institutional Review Board (IRB) and regularly reviewed research materials prepared by staff to ensure that human participants' welfare and privacy were protected.
- 07/06 – 04/07 **Research Assistant II**, West Virginia University Department of Community Medicine, Morgantown, West Virginia
- 05/05-05/06 **Graduate Teaching & Research Assistant**, West Virginia University, Morgantown, West Virginia

Training Relevant to Research and Evaluation

- 04/11 Learning Mathematics for Teaching Instrument Administration Training, AERA, New Orleans, LA
- 10/08 Qualitative Methods, AEA, Denver, CO
- 10/07 Multilevel Methods, AEA, Baltimore, MD
- 10/07 Evaluation 101, AEA, Baltimore, MD
- 09/07 CITI – Human Research Curriculum Training A, Edvantia, Charleston, WV
- 05/07 CITI – Human Research Curriculum Training B, Edvantia, Charleston, WV
- 09/06 HIPAA – RESEARCH Requirements Training, West Virginia University, Morgantown, WV
- 08/04 Human Protections Training, West Virginia University, Morgantown, WV

Relevant Presentations

- Bradley, K. L., Cowley, K. S., D'Brot, J., Finch, N., Good, K., & **Hixson, N.** (November, 2008). *CC3: Lessons learned from the evaluation of three comprehensive centers*. American Evaluation Association, Denver, CO.
- Hixson, N. K. (April, 2010). *Applying a consistent approach to monitoring student growth at the school, classroom and system level* West Virginia State Board of Education. Morgantown, WV.
- Kettler, R., Scholz, C. L., Oderman, C. E., & **Hixson, N. K.** (June, 2010). *Innovative uses of technology to support assessment decision-making and curricular alignment for students with disabilities*. National Conference on Student Assessment, Detroit, MI.

Other Completed Research and Technical Reports

- Bradley, K., Anstrom, K., Cowley, K., **Hixson, N.**, McGee, L., & Muirhead, M. (2008). *Evaluation report: MACC evaluation for year three (July 1, 2007 – June 30, 2008)*. Arlington, VA: The George Washington University Center for Equity and Excellence in Education.
- Bradley, K., D'Brot, J., Cowley, K., Finch, N., Good, K., **Hixson, N.**, Howley, C., & McGee, L. (2009). *The Implications of Context in Pragmatic Practice: A Modified Grounded Theoretical Tool*. Charleston, WV: Edvantia.

- Hixson, N. K.** (2008). *Comparative analysis of the 2007 and 2008 administrations of the Delaware Education Support System (DESS) district-level survey*. Arlington, VA: The George Washington University Center for Equity and Excellence in Education.
- Hixson, N. K.** (2008). *Findings from the October 2008 LEA success planning and consolidated grant application process survey and focus groups*. Arlington, VA: The George Washington University Center for Equity and Excellence in Education.
- Hixson, N., D'Brot, J., White, L., & Betebenner, D.** (2010). *An introduction to the West Virginia growth model*. Charleston, WV: West Virginia Department of Education.
- Hixson, N., & Hammer, P. C.** (2011). *Examining accommodations in West Virginia: A descriptive analysis of accommodations specified for students in individualized education plans, 504 plans, and limited English proficient plans in 2009-2010*. Charleston, WV: West Virginia Department of Education, Division of Curriculum and Instructional Services, Office of Research.
- Jones, A., O'Connor, C., **Hixson, N.**, Hughes-Webb, G., & Chadwick, K. (2009). *The Ohio High School Transformation Initiative (OHSTI) capacity-building interventions: 2008-2009 summative evaluation*. Charleston, WV: Edvantia.
- Voelkel, S., **Hixson, N. K.**, & Cowley, K. S. (2007). *People and Moments in Time: Evaluation of Year 2 (2006-2007)*. **Third Place Program Evaluation Studies Category: American Educational Research Association (AERA) 2008**. Charleston, WV: Edvantia.
- White, L., **Hixson, N.**, D'Brot, J., & Perdue, J. (2009a). *Examining Accommodations in West Virginia (2008-2009)*. Charleston, WV: West Virginia Department of Education.
- White, L., **Hixson, N.**, D'Brot J., & Perdue J. (2009b). *Research brief: Acuity usage and WESTEST 2 performance*. Charleston, WV: West Virginia Department of Education.
- White, L., **Hixson, N.**, D'Brot, J., & Perdue, J. (2009c). *Research brief: Human to engine score comparability for WESTEST 2 Online Writing*. Charleston, WV: West Virginia Department of Education.
- White, L., **Hixson, N.**, D'Brot, J., & Perdue, J. (2009d). *Research brief: Impact of Writing Roadmap 2.0 on WESTEST 2 Online Writing Assessment scores*. Charleston, WV: West Virginia Department of Education.
- White, L., **Hixson, N.**, D'Brot, J., & Perdue, J. (2010). *Intended and unintended uses and consequences of West Virginia's assessment and accountability system (part I report)*. Charleston, WV: West Virginia Department of Education.
- White, L. J., **Hixson, N.**, Hammer, P. C., Smith, D. L., & D'Brot, J. (2010). *Examining the effectiveness of Closing the Achievement Gap Professional Development Demonstration Schools*. Charleston, WV: West Virginia Department of Education, Division of Curriculum and Instructional Services, Office of Research.
- White, L. J., **Hixson, N. K.**, Whisman, S. A. (2011). *Writing Roadmap usage and additional predictors of WESTEST 2 Online Writing scores*. Charleston, WV: West Virginia Department of Education, Division of Curriculum and Instructional Services, Office of Research.

Curriculum Vitae

Juan M. D'Brot, IV

(b)(6)

Education

Doctor of Philosophy Graduation Major: Psychology (GPA: 4.00)	Capella University Concentration: Industrial/Organizational	Expected July, 2012
Master of Arts Major: Communication Studies	West Virginia University Concentration: Theory and Research	June, 2006 GPA:3.92/4.00
Bachelor of Arts Major: Communication Studies	West Virginia University Concentration: Data Analysis	May, 2005 GPA: 3.39/4.00

Expertise and Academic Interests

Large Scale Assessment, Reporting and Visualizations, Research Methods, Organizational Development, Strategic Planning, Logic Modeling, Organizational and Educational Psych, Psychometrics, Organizational Communication, Interpersonal Communication, Program Evaluation, Evaluation of Technical Assistance Organizations, Evaluation Capacity Building, Evaluation Theory, Practice, and Use, Conflict Management

Training

07/08	Hierarchical Linear Models II: Special Topics, Inter-Consortium for Political and Social Research (ICSPR) at the University of Michigan, Ann Arbor, MI.
11/07	Experimental Design, American Evaluation Association, Baltimore, MD
11/07	Logic Models and Program Theory, American Evaluation Association, Baltimore, MD.
06/07	Hierarchical Linear Models I: Introduction, Inter-Consortium for Political and Social Research (ICSPR) as part of the Institute for Social Research at the University of Michigan, Amherst, MA.
03/07 to 05/07	Project Management Applications, Garnet Career College, Charleston, WV.
01/07 to 02/07	Fundamentals of Project Management, Garnet Career College, Charleston, WV.
10/06 to 11/07 Education	Practical Rasch Measurement course through The Institute for Statistics
10/06	Online Course in the Protection of Human Research Subjects, Collaborative IRB Training Initiative, Edvantia, Charleston, WV.
09/06	QSR N(Vivo)7 Training, Edvantia, Charleston, WV.

8/06 Advanced Statistical Regression Using SPSS, SPSS Headquarters Chicago, IL.

Employment

07/10 to present *Executive Director of Assessment and Accountability*, West Virginia
Department of Education, West Virginia

Responsible for developing and overseeing assessment unit's projects, studies and budgets, managing the day-to-day work of the unit's activities, and managing the assessment development, implementation, and trainings. In addition to day-to-day duties, responsible for working closely with vendors who are contracted by WVDE, preparing and responding to requests for proposals, requests for quotes, and other publications, and developing and delivering local, state and national presentations. Responsibilities also include working with psychometricians to determine appropriate statistical analysis relevant to assessments and research, costing all projects, maintaining budgets, and working with a variety of offices within the department to drive the division's and department's initiatives. Position also requires proficiency in data analysis, report preparation, and dissemination of findings to appropriate audiences.

12/09 to 07/10 *Research & Evaluation Coordinator*, West Virginia Department of Education,
Charleston, West Virginia

Responsible for coordinating activities for various research and evaluation contracts, developing proposals, and assisting with the design and implementation of research and evaluation plans. In addition to designing, implementing, and reporting on research studies in various contexts, responsible for assisting in the development of applications for various federal grant. Responsibilities also include the streamlining of the Office of Assessment, Accountability, and Research's overall project management. Position requires proficiency in research and evaluation techniques, including a diverse set of quantitative and qualitative approaches to data analysis, familiarity and understanding of psychometric principles in large-scale assessment, and the ability to present findings to stakeholder groups of varying levels of expertise (i.e., general population to technical audiences).

05/06 to 12/09 *Research & Evaluation Specialist*, Edvantia, Inc., Charleston, West Virginia

Responsible for coordinating day-to-day evaluation activities for multiple evaluation projects, developing proposals, and assisting with the design and implementation of research and evaluation plans. Responsibilities include designing the appropriate instrumentation (e.g., surveys, interview and observation protocols, and student assessment measures) for responding to research and evaluation questions and developing databases for data collection activities. Position requires proficiency in both quantitative and qualitative designs, methodologies, and analytic techniques. Work also includes conducting qualitative and quantitative data collection and analysis (site visits, interviews, focus groups, observations, surveys, achievement tests). Additionally, responsible for supervising individual contract staff and direct reports to ensure project tasks are completed appropriately and efficiently as well promoting employee growth and intrinsic motivation. Responsibilities also include assisting

clients in their strategic planning, developing work scopes, monitoring progress, and organizational development.

05/05-05/06
Morgantown, **Graduate Teaching & Research Assistant**, West Virginia University,
West Virginia

05/05-05-06 **Research Assistant**, West Virginia University, Morgantown, West Virginia

Relevant Publications

- Whisman, A., D'Brot, J., Hixson, N., & White, L. (2010). *Supplemental educational services in the State of West Virginia: Evaluation report for 2009–2010*. Charleston, WV: West Virginia Department of Education, Division of Curriculum and Instructional Services, Office of Research.
- Hixson, N., D'Brot, J., White, L., & Betebenner, D. (2010). *An introduction to the West Virginia growth model*. Charleston, WV: West Virginia Department of Education.
- D'Brot, J. M., IV. (2010). The development of a typology for interracial relationships. In D. Brunson & L. Lampl (Eds.), *Interracial communication: Contexts, communities, and choices*. Dubuque, IA: Kendall/Hunt.
- White, L. Hixson, N., Hammer, P. C., Smith, D. L., & D'Brot, J. (2010). *Examining the effectiveness of Closing the Achievement Gap Professional Development Demonstration Schools*. Charleston, WV: West Virginia Department of Education, Division of Curriculum and Instructional Services, Office of Research.
- White, L., Hixson, N., & D'Brot, J. (2010). *Hi-Y youth programs evaluation 2010 Ohio: Model United Nations and Youth in Government (legislative and judicial) programs*. Charleston, WV: West Virginia Department of Education, Division of Curriculum and Instructional Services, Office of Research.
- White, L., Hixson, N., & D'Brot, J. (2010). *Hi-Y youth programs evaluation 2010 West Virginia: Model United Nations and Youth in Government (legislative and judicial) programs*. Charleston, WV: West Virginia Department of Education, Division of Curriculum and Instructional Services, Office of Research.
- White, L., Hixson, N., D'Brot, J., & Perdue, J. (2010). *Intended and unintended uses and consequences of West Virginia's assessment and accountability system (part I report)*. Charleston, WV: West Virginia Department of Education.
- White, L., Hixson, N., D'Brot, J., & Perdue, J. (2010). *Research brief: Acuity usage and WESTEST 2 performance*. Charleston, WV: WVDE.
- White, L., Hixson, N., D'Brot, J., & Perdue, J., with Foster, S. & Rhudy, V. (2010). *Research brief: Impact of Writing Roadmap 2.0 on WESTEST 2 Online Writing Assessment scores*. Charleston, WV: WVDE.
- White, L., Hixson, N., D'Brot, J., & Perdue, J. (2009a). *Examining Accommodations in West Virginia (2008-2009)*. Charleston, WV: West Virginia Department of Education.
- White, L., Hixson, N., D'Brot J., & Perdue J. (2009b). *Research brief: Acuity usage and WESTEST 2 performance*. Charleston, WV: West Virginia Department of Education.
- White, L., Hixson, N., D'Brot, J., & Perdue, J. (2009c). *Research brief: Human to engine score comparability for WESTEST 2 Online Writing*. Charleston, WV: West Virginia Department of Education.

White, L., Hixson, N., D'Brot, J., & Perdue, J. (2009d). *Research brief: Impact of Writing Roadmap 2.0 on WESTEST 2 Online Writing Assessment scores*. Charleston, WV: West Virginia Department of Education.

Relevant Professional Convention Research Presentations

Betebenner, D., Betts, J., D'Brot, J. M., & Smith, C. (2011, June) *Multiple ways to measure student growth:*

Findings from research and practice. Invited panel at the annual meeting of the National Conference on Student Assessment, Orlando, FL.

Ferrara, S., Lewis, D., Mercado, R., D'Brot, J. M., Egan, K., & Barth, J. (2011, June). Procedures for setting

benchmarked performance standards: *Standard setting workshop procedures, panelist judgments, and empirical results*. In K. Egan (Chair), *Innovations in standard setting*. Invited symposium at the annual meeting of the National Council on Measurement in Education, New Orleans, LA.

Bradley, K., D'Brot, J. M., Finch, N., Good, K., Hixson, N. K., & McGee, L. (2008, November). *CC3: Lessons*

learned from the evaluation of three comprehensive centers. Paper presented at the annual meeting of the American Evaluation Association, Denver, CO.

CURRICULUM VITAE

SHERRI D. GOODMAN

Education and

Licenses

- 1975 B.A., Brandeis University
 Waltham, MA
 Graduated Magna Cum Laude
- 1982 J. D., University of Michigan
 Ann Arbor, MI
 Graduated Magna Cum Laude
 Order of the Coif
- 1983 Admitted to The West Virginia State Bar and various
 Federal Courts

Legal Employment

- 1983-1984 Associate - Preiser & Wilson
 Charleston, WV
 Primarily criminal defense
- 1984-1986 Partner - Dusic & Dusic
 Charleston, WV
 Insurance defense, employment discrimination
- 1986-1988 Assistant Disciplinary Counsel
 The West Virginia State Bar
 2006 Kanawha Blvd. E
 Charleston WV 24311
 Lawyer disciplinary work
- 1988-1989 Associate - King, Betts & Allen
 Charleston, WV
 Criminal defense, ERISA, antitrust

- 1990-1999 Bar Counsel/Chief Lawyer Disciplinary Counsel
The West Virginia State Bar/Lawyer Disciplinary Board
2008 Kanawha Blvd. E
Charleston, WV 25311
Lawyer disciplinary work
- 1990-2010 West Virginia Board of Law Examiners
4700 MacCorkle Avenue SE, Suite 1200 C
Charleston, WV 25304
- 1999-May, 2000 Counsel to the West Virginia Ethics Commission
1207 Quarrier St.
Charleston, WV 25301
(part-time) Interpretation of Governmental Ethics Act and Open
Governmental Proceedings Act, investigation of complaints brought under
the Governmental Ethics Act
- Aug.1999-2006 Goodman Advocacy
1204 Virginia St. E., Suite 201
Charleston, WV 25301

Private practice with emphasis on advising lawyers on professional
responsibility issues, representing lawyers before the Lawyer Disciplinary
Board, representing plaintiffs in legal malpractice actions, serving as an
expert witness on legal ethics and malpractice issues, and giving continuing
legal education presentations on legal ethics and malpractice issues
- Oct. 2005-present West Virginia Department of Education
Room 362, Building 6

1900 Kanawha Blvd. E
Charleston, WV 25305

Staff attorney, representing WVDE in administrative hearings concerning grievances, teacher and bus operator certification matters and inter-county transfers, and advising WVDE in matters involving education law, real property, copyright and others issues

Articles

"You got the right stuff, baby, uh-huh. Lawyer advertising in the 90s", *The West Virginia Lawyer*, Jan. 1995

"Traversing Candyland: How to Stay Out of the Molasses Swamp", *The West Virginia Lawyer*, Feb. 1997

Periodic column entitled "Did You Know" in *The West Virginia Lawyer* 1991 - 1999

"The Screening of America, Part I", *The West Virginia Lawyer*, Oct.-Dec. 2010

"The Screening of America, Part II", *The West Virginia Lawyer*, Jan.-March 2011

Organizations

American Bar Association; Center for Professional Responsibility

Association of Professional Responsibility Lawyers

**WEST VIRGINIA
DEPARTMENT OF EDUCATION**

**NOTICE OF VACANCY
An Equal Opportunity Employer**

TITLE OF VACANCY: Data Governance Manager, Office of Legal Services

ADMINISTRATIVE UNIT: State Superintendent of Schools

EMPLOYMENT RELATIONSHIP:

Department of Education staff are employed upon recommendation of the state superintendent of schools and are state employees. No representative or employee of the state is authorized to enter into any employment contract or other agreement. Department staff work under the direction of the state superintendent of schools for the general supervision of the free schools in the state and implementing the policies of the board and other necessary tasks as determined by the state superintendent or his/her designee. Each employee is "at-will" and subject to termination by the state superintendent at any time, with or without notice, cause or compensation.

The employment relationship between the state superintendent and the employee may be terminated by either party. Reasons for termination by the state superintendent include, but are not limited to, immorality, incompetency, cruelty, insubordination, intemperance, willful neglect of duty, unsatisfactory performance, the conviction of a felony or a guilty plea or a plea of no contest to a felony charge, misuse of funds or property, violations of law or policies of the state board, lack of need or a lack or loss of funding.

EXPECTATIONS:

1. The staff member works effectively as a member of an educational team.
2. The staff member demonstrates self control and exhibits an attitude of mutual respect.
3. The staff member is ethical and demonstrates efficient work habits.
4. The staff member demonstrates an ability to work effectively with Department personnel.

DUTIES AND RESPONSIBILITIES:

- Establish, chair, and manage the work of the state's Data Governance Committee.
- Serve as the chief liaison between the West Virginia Department of Education's Data Governance Committee and the Data Policy Committee.
- Define and oversee the work of a series of ad hoc Data Steward Task Teams tasked with accomplishing the ground level work related to critical data elements warehoused within the West Virginia Department of Education's Statewide Longitudinal Data System.
- Serve as the liaison for all internal and external WVDE data governance issues.
- Other duties as assigned by the office director which are required to accomplish the goals of the Department of Education.

QUALIFICATIONS:

1. Master's degree in from an accredited college or university education, science, research, statistics or three years experience in research/data management or related fields is required (a doctorate is not required, but preferred).
2. Ability to produce high quality, well-organized documents (e.g., reports, articles, studies,

- white papers, publications)
3. Strong understanding of education system related privacy regulations (e.g., FERPA, PPRA, HIPPA)
 4. Experience navigating data quality and/or governance issues required.
 5. Effective and accurate writing and oral communication skills are required.
 6. Problem solving and critical thinking skills are required.
 7. Ability to multi-task is required.
 8. Extensive knowledge of education system policies required.
 9. Certification in project management preferred.
 10. Previous experience chairing effective/functional committees preferred.
 11. Strong working knowledge of education data standards preferred.
 12. Prior work experience in data governance preferred.
 13. Work experience with IBM iSeries, RPG, DB2/400, ColdFusion, SQL, and MicroSoft Excel preferred.

SALARY: \$81,499.86 annually

CLOSING: TBD

Candidates for employment must complete an official application form that may be obtained by contacting the Office of Human Resources at (304) 558-2702. The application may be downloaded at <http://wvde.state.wv.us/hr/>.

APPLY TO: Liz Bryant, Secretary III-A
Office of Human Resources
WV Department of Education
Building 6, Room 264
1900 Kanawha Blvd. East
Charleston, West Virginia 25305-0330
Phone: 304-558-2702
Fax: 304-558-0216
Email: lbryant@access.k12.wv.us

DISCRIMINATION PROHIBITED: The West Virginia Department of Education does not discriminate on the basis of sex, race, color, religion, disability, age and national origin in employment and in administration of any of its education programs and activities. Inquiries may be directed to the Elimination of Sex Discrimination Program Coordinator, 558-3430; or to the Section 504 Coordinator, 558-2696, WV Department of Education, Charleston, West Virginia 25305; or to the U.S. Department of Education's Director of the Office of Civil Rights, (215) 596-6795.

Sara Kitts

(b)(6)

SKILLS:

- *Experienced in performing multiple tasks with attention to detail*
- *Experienced in both team and individual projects*
- *Ability to communicate with user community in technical and non- technical terms*
- *Skilled at problem identification, definition and resolution*
- *Demonstrated ability to learn and utilize emerging technologies*
- *Excellent organization skills*

WORK EXPERIENCE:

West Virginia Department of Education

Charleston, West Virginia

Starting date: August 2008 - present

Coordinator, Data Collection and Reporting

- Works with a full range of statistical/data collection and reporting projects
- Designed and implemented ColdFusion web applications
- Maintain documentation, processing notes and detailed functional specs for all interfaces and procedures I have created.
- Analyze projects and troubleshoot problems
- Produce State and County report cards
- Create annual statistical summary, Federal financial reports, collection and reporting on the non-public school statistics, annual and district financial reports, and ad hoc data requests

Wells Fargo Third Party Administrator

Charleston, West Virginia

Supervisor's name – Julia Reiser

Starting and ending dates: October 2000 – August 2008

Hours worked per week – 40+

Programmer Analyst II

- Maintain, code, and design applications on IBM AS400 systems using: COBOL, DB2, SEQUEL, CL (Control Language), and DDS.
- Work on Windows XP systems. Work fluently with WORD, EXCEL, POWERPOINT, and Access.
- Excellent ability to perform independent preliminary analysis of user requirements and develop effective solutions that satisfy user requirements
- Extensive experience in designing, developing, testing and implementing a variety of IT applications in a number of different development environments

- Significant experience in performing day-to-day maintenance and support of existing applications in parallel with analysis, design, and development for new applications
- Responsible for programming, unit testing, user acceptance testing, and program implementation through change management
- Extremely organized, detail oriented and responsible for all program and end user documentation.
- Provide technical support to end-users to help resolve programming problems
- Planned, directed and controlled all IRS printing and filing (for W2s, 1099s, and 1099Rs) in order to meet the strict IRS requirements for our clients and government.
- Worked on the EDI/HIPPA compliance team. Responsibilities included design, analysis, documentation and implementation of the 835 ERA components to ensure HIPAA regulatory compliance for claims transmittals.
- Work with ECMAP software to create maps to populate X12 data for our 835 transactions.
- Have recently started working in the .NET environment using Visual Basic

EDUCATION

College:

Mountain State University

Charleston, West Virginia 25302

Major: Master in Strategic Leadership

Graduated: March 2008 received Master degree in Strategic Leadership

Glenville State College

Glenville, West Virginia 26351

Major: Information Systems

Graduated May 2000 received my Bachelor degree in Information Systems.

**WEST VIRGINIA
DEPARTMENT OF EDUCATION**

**NOTICE OF VACANCY
An Equal Opportunity Employer**

TITLE OF VACANCY: Secretary II, Office of Information Systems

ADMINISTRATIVE UNIT: State Superintendent of Schools

EMPLOYMENT RELATIONSHIP:

Department of Education staff are employed upon recommendation of the state superintendent of schools and are state employees. No representative or employee of the state is authorized to enter into any employment contract or other agreement. Department staff work under the direction of the state superintendent of schools for the general supervision of the free schools in the state and implementing the policies of the board and other necessary tasks as determined by the state superintendent or his/her designee. Each employee is "at-will" and subject to termination by the state superintendent at any time, with or without notice, cause or compensation.

The employment relationship between the state superintendent and the employee may be terminated by either party. Reasons for termination by the state superintendent include, but are not limited to, immorality, incompetency, cruelty, insubordination, intemperance, willful neglect of duty, unsatisfactory performance, the conviction of a felony or a guilty plea or a plea of no contest to a felony charge, misuse of funds or property, violations of law or policies of the state board, lack of need or a lack or loss of funding.

EXPECTATIONS:

1. The staff member works effectively as a member of an educational team.
2. The staff member demonstrates self control and exhibits an attitude of mutual respect.
3. The staff member is ethical and demonstrates efficient work habits.
4. The staff member demonstrates an ability to work effectively with Department personnel.

DUTIES AND RESPONSIBILITIES:

- Perform duties as assigned by the Executive Director, Office of Information Systems.
- Focus on support of the documentation, progress, and infrastructure development of the WVDE's Statewide Longitudinal Data System (SLDS) initiative.
- Assist with evaluation/testing of end user interfaces developed as a part of the SLDS.
- Provide support services to Data Governance Manager and SLDS Curriculum Development Specialists.
- Answer Help Desk calls (log calls or answer questions as appropriate).
- Greet the public and work well with others.
- Operate word processing, electronic spreadsheet and data management software and equipment as required by the position.
- Establish and maintain electronic reports, filing systems, and office records.
- Assist in planning and scheduling conferences and training sessions.
- Attend to telephone calls and visitors; provide information or refer to proper staff member(s).
- Operate standard office equipment as required.

- Perform electronic accounting functions in FIMS and TEAM mainframe applications.
- In state travel will be required.
- Perform other duties as related to job assignment by the Executive Director.

QUALIFICATIONS:

1. High school diploma or equivalent.
2. Five (5) years of experience. (Substitution: successful completion of study in an accredited college or university, or resident business or vocational school training may be substituted for the required experience on a year-for-year basis).
3. Typing skills at 60 wpm.
4. Strong oral communication skills.
5. Dependability, dedication and commitment.
6. Strong word processing, electronic spreadsheet and data management skills.
7. Ability to multi-task when presented with various assignments.
8. Strong personal computer skills.
9. Working knowledge of various operating systems and software packages preferred.
10. Familiarity with State and WVDE purchasing procedures preferred.
11. Personal initiative (self-starter).
12. Must demonstrate strong work habits and attendance record.

SALARY: Based on Kanawha County Salary Schedule, commensurate with educational level and years of experience.

CLOSING: TBD

Candidates for employment must complete an official application form that may be obtained by contacting the Office of Human Resources at (304) 558-2702. The application may be downloaded at <http://wvde.state.wv.us/hr/>.

APPLY TO: Liz Bryant, Secretary III-A
 Office of Human Resources
 WV Department of Education
 Building 6, Room 264
 1900 Kanawha Blvd. East
 Charleston, West Virginia 25305-0330
 Phone: 304-558-2702
 Fax: 304-558-0216
 Email: lbryant@access.k12.wv.us

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**WEST VIRGINIA
DEPARTMENT OF EDUCATION**

**NOTICE OF VACANCY
An Equal Opportunity Employer**

TITLE OF VACANCY: Secretary II, Office of Research

ADMINISTRATIVE UNIT: Division of Curriculum & Instruction

EMPLOYMENT RELATIONSHIP:

Department of Education staff are employed upon recommendation of the state superintendent of schools and are state employees. No representative or employee of the state is authorized to enter into any employment contract or other agreement. Department staff work under the direction of the state superintendent of schools for the general supervision of the free schools in the state and implementing the policies of the board and other necessary tasks as determined by the state superintendent or his/her designee. Each employee is "at-will" and subject to termination by the state superintendent at any time, with or without notice, cause or compensation.

The employment relationship between the state superintendent and the employee may be terminated by either party. Reasons for termination by the state superintendent include, but are not limited to, immorality, incompetency, cruelty, insubordination, intemperance, willful neglect of duty, unsatisfactory performance, the conviction of a felony or a guilty plea or a plea of no contest to a felony charge, misuse of funds or property, violations of law or policies of the state board, lack of need or a lack or loss of funding.

EXPECTATIONS:

1. The staff member works effectively as a member of an educational team.
2. The staff member demonstrates self control and exhibits an attitude of mutual respect.
3. The staff member is ethical and demonstrates efficient work habits.
4. The staff member demonstrates an ability to work effectively with Department personnel.

DUTIES AND RESPONSIBILITIES:

- Perform duties as assigned by the Executive Director, Office of Research.
- Focus on support of the documentation, progress, and infrastructure development of the WVDE's Statewide Longitudinal Data System (SLDS) research initiative.
- Assist with evaluation/testing of end user interfaces and research tools developed as a part of the SLDS.
- Provide support services to SLDS research staff.
- Answer Help Desk calls (log calls or answer questions as appropriate).
- Greet the public and work well with others.
- Operate word processing, electronic spreadsheet and data management software and equipment as required by the position.
- Establish and maintain electronic reports, filing systems, and office records.
- Assist in planning and scheduling conferences and training sessions.
- Attend to telephone calls and visitors; provide information or refer to proper staff member(s).
- Operate standard office equipment as required.

- Perform electronic accounting functions in FIMS and TEAM mainframe applications.
- In state travel will be required.
- Perform other duties as related to job assignment by the Executive Director.

QUALIFICATIONS:

1. High school diploma or equivalent.
2. Five (5) years of experience. (Substitution: successful completion of study in an accredited college or university, or resident business or vocational school training may be substituted for the required experience on a year-for-year basis).
3. Typing skills at 60 wpm.
4. Strong oral communication skills.
5. Dependability, dedication and commitment.
6. Strong word processing, electronic spreadsheet and data management skills.
7. Ability to multi-task when presented with various assignments.
8. Strong personal computer skills.
9. Working knowledge of various operating systems and software packages preferred.
10. Familiarity with State and WVDE purchasing procedures preferred.
11. Personal initiative (self-starter).
12. Must demonstrate strong work habits and attendance record.

SALARY: Based on Kanawha County Salary Schedule, commensurate with educational level and years of experience.

CLOSING: TBD

Candidates for employment must complete an official application form that may be obtained by contacting the Office of Human Resources at (304) 558-2702. The application may be downloaded at <http://wvde.state.wv.us/hr/>.

APPLY TO: Liz Bryant, Secretary III-A
 Office of Human Resources
 WV Department of Education
 Building 6, Room 264
 1900 Kanawha Blvd. East
 Charleston, West Virginia 25305-0330
 Phone: 304-558-2702
 Fax: 304-558-0216
 Email: lbryant@access.k12.wv.us

DISCRIMINATION PROHIBITED: The West Virginia Department of Education does not discriminate on the basis of sex, race, color, religion, disability, age and national origin in employment and in administration of any of its education programs and activities. Inquiries may be directed to the Elimination of Sex Discrimination Program Coordinator, 558-3430; or to the Section 504 Coordinator, 558-2696, WV Department of Education, Charleston, West Virginia 25305; or to the U.S. Department of Education's Director of the Office of Civil Rights, (215) 596-6795.

WEST VIRGINIA DEPARTMENT OF EDUCATION

JOB DESCRIPTION

POSITION TITLE: SLDS Curriculum Development Specialist – WVDE Office of Information Systems

ADMINISTRATIVE UNIT: Office of the Superintendent

EMPLOYMENT RELATIONSHIP:

Department of Education staff are employed upon recommendation of the state superintendent of schools and are state employees. No representative or employee of the state is authorized to enter into any employment contract or other agreement. Department staff work under the direction of the state superintendent of schools for the general supervisions of the free schools in the state and implementing the policies of the board and other necessary tasks as determined by the state superintendent or his/her designee. Each employee is "at-will" and subject to termination by the state superintendent at any time with or without notice, cause or compensation.

EXPECTATIONS:

1. Works effectively both independently and as a member of an educational team
2. Demonstrates self-control and exhibits an attitude of mutual respect
3. Is ethical and demonstrates good work habits (e.g., is timely, efficient, reliable and willing to work extended hours when necessary)
4. Demonstrates an ability to understand and work effectively with a variety of education stakeholders (including county and school personnel)
5. Is capable of conducting staff development activities and possesses good presentation skills
6. Demonstrates problem solving skills and is highly self-directed

DUTIES AND RESPONSIBILITIES:

1. Assists various program offices within the WVDE in the development of comprehensive professional development modules focused on using critical data to improve instruction and drive school/classroom decision-making.
2. Provides face-to-face high quality professional development for regional and local education agency and school staff regarding the access and use of state longitudinal data system (SLDS).
3. Provides ongoing technical assistance to regional and local education agency staff regarding use of SLDS data.
4. Works with other WVDE offices to determine best practices for professional development design and delivery.
5. Creates sustainable professional development materials/products to be housed on SLDS website.
6. Participates in meetings of Data Governance Committee
7. Works with secretaries to maintain records of individuals trained in use of SLDS and contact information for participation in evaluation activities.

8. Assists SLDS Evaluation Coordinator in the collection of implementation and outcome data for formative and summative evaluation of SLDS project.
9. Develops and delivers local, state, and national presentations
10. In-state travel will be required.
11. Performs other duties as assigned

QUALIFICATIONS:

1. Bachelor's degree in education-related field or five years experience in education, data management, or other related fields is required (a master's degree is not required, but preferred)
2. Working experience in school improvement and/or with education data systems is required
3. Demonstrated success in providing high quality professional development, training, and technical assistance.
4. Ability to produce high quality, well-organized documents (e.g., reports, articles, studies, white papers, publications)
5. Ability to communicate to a range of audiences including policy makers, educators, and the general public
6. Demonstrated understanding of education data including assessment information.
7. Experience in analyzing, interpreting, and reporting data using graphic displays that are easily accessible to the general public
8. Strong understanding of relevant privacy regulations (e.g., FERPA, PPRA, HIPPA)
9. Experience with data analysis and interpretation
10. Familiarity with the organizational structure of the West Virginia Department of Education
11. Strong technology skills
12. Excellent written and verbal communication skills

SALARY: \$60,056.10 annually

CLOSING: TBD

Candidates for employment must complete an official application form that may be obtained by contacting the Office of Human Resources at (304) 558-2702. The application may be downloaded at <http://wvde.state.wv.us/hr/>.

APPLY TO: Liz Bryant, Secretary III-A
Office of Human Resources
WV Department of Education
Building 6, Room 264
1900 Kanawha Blvd. East
Charleston, West Virginia 25305-0330
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**WEST VIRGINIA
DEPARTMENT OF EDUCATION**

JOB DESCRIPTION

POSITION TITLE: SLDS Evaluation Coordinator – WVDE Office of Research

ADMINISTRATIVE UNIT: Division of Curriculum and Instructional Services

EMPLOYMENT RELATIONSHIP:

Department of Education staff are employed upon recommendation of the state superintendent of schools and are state employees. No representative or employee of the state is authorized to enter into any employment contract or other agreement. Department staff work under the direction of the state superintendent of schools for the general supervisions of the free schools in the state and implementing the policies of the board and other necessary tasks as determined by the state superintendent or his/her designee. Each employee is "at-will" and subject to termination by the state superintendent at any time with or without notice, cause or compensation.

EXPECTATIONS:

1. Works effectively both independently and as a member of an educational team
2. Demonstrates self-control and exhibits an attitude of mutual respect
3. Is ethical and demonstrates good work habits (e.g., is timely, efficient, reliable and willing to work extended hours when necessary)
4. Demonstrates an ability to understand and work effectively with a variety of education stakeholders (including county and school personnel)
5. Is capable of conducting staff development activities and possesses good presentation skills
6. Demonstrates problem solving skills and is highly self-directed

DUTIES AND RESPONSIBILITIES:

1. Assumes responsibility for conducting formative and summative evaluation of state longitudinal data systems (SLDS) program (3-year commitment at .50 FTE/year).
2. Serves on state Data Governance Committee.
3. Develops or locates appropriate research instruments to address specific research and evaluation questions (e.g., surveys, interview protocols, observation forms, rubrics, etc.)
4. Conceptualizes and plans high quality research and evaluation activities/studies involving diverse stakeholder groups
5. Utilizes appropriate sampling techniques to ensure research findings adequately address specific research and evaluation questions and are generalizable outside of study context
6. Specifies and follows appropriate and standardized procedures for data collection, entry, cleaning, verification and analysis
7. Conducts a variety of basic and complex statistical analyses of quantitative data, demonstrating superior skills with data analysis software (i.e., SAS, SPSS)
8. Conducts appropriate analyses of a broad array of qualitative data collected via multiple methods

9. Disseminates and adequately defends research and evaluation findings through presentation to the state board, other WVDE offices and to the general public
10. Selects and administers a variety of research designs as appropriate to answer specific research and evaluation questions (e.g., experiment, quasi experiment, case study, mixed method evaluation, etc.)
11. Develops, implements, and manages basic and complex data collection systems of varying scope/size
12. Locates and summarizes relevant research
13. Develops and delivers local, state, and national presentations
14. Performs other duties as assigned

QUALIFICATIONS:

1. Master's degree in education, science, research, statistics or three years experience in research/data management or related fields is required (a doctorate is not required, but preferred)
2. Working experience in educational measurement and statistical analysis methods is required
3. Demonstrated success in conducting basic and complex statistical analyses and appropriately interpreting data
4. Ability to produce high quality, well-organized documents (e.g., reports, articles, studies, white papers, publications)
5. Ability to communicate research and evaluation findings to a range of audiences including policy makers, educators, and the general public
6. Demonstrated understanding of valid and reliable research designs that include appropriate sampling, data collection, analysis, and reporting
7. Demonstrated experience and success in the development/coordination of all technical materials for research studies and formative and summative evaluation
8. Demonstrated experience in educational research/evaluation
9. Experience in preparing research documents for publication
10. Demonstrated success in utilizing a variety of research methodologies
11. Experience in analyzing, interpreting, and reporting data using graphic displays that are easily accessible to clients and the general public
12. Experience with methods used for matching cases in quasi-experimental research (e.g., propensity score matching)
13. Strong understanding of human subjects research and relevant privacy regulations (e.g., FERPA, PPRA, HIPPA)
14. Experience with data analysis using large datasets
15. Knowledge and understanding of currently available methods for calculating student growth and using growth data to inform instructional and policy decisions
16. Familiarity with the organizational structure of the West Virginia Department of Education
17. Strong technology skills
18. Excellent written and verbal communication skills

SALARY: .50 FTE (20 Days Project Year 1, 130.5 Days Project Year 2, and 130.5 Days Project Year 3 @ a daily rate of \$312.26/day)
 Year 1 - \$5,245.20 Year 2 - \$40,749.93 Year 3 - \$40,749.93

**WEST VIRGINIA
DEPARTMENT OF EDUCATION**

**NOTICE OF VACANCY
An Equal Opportunity Employer**

TITLE OF VACANCY: Software Programmer, Office of Information Systems

ADMINISTRATIVE UNIT: State Superintendent of Schools

EMPLOYMENT RELATIONSHIP:

Department of Education staff are employed upon recommendation of the state superintendent of schools and are state employees. No representative or employee of the state is authorized to enter into any employment contract or other agreement. Department staff work under the direction of the state superintendent of schools for the general supervision of the free schools in the state and implementing the policies of the board and other necessary tasks as determined by the state superintendent or his/her designee. Each employee is "at-will" and subject to termination by the state superintendent at any time, with or without notice, cause or compensation.

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EXPECTATIONS:

1. The staff member works effectively as a member of an educational team.
2. The staff member demonstrates self control and exhibits an attitude of mutual respect.
3. The staff member is ethical and demonstrates efficient work habits.
4. The staff member demonstrates an ability to work effectively with Department personnel.

DUTIES AND RESPONSIBILITIES:

- Perform duties as assigned by the Executive Director in the Office of Information Systems.
- Support interoperability of the West Virginia Department of Education's administrative data systems and Statewide Longitudinal Data System.
- Demonstrate ability to learn programming languages.
- Support training of other staff and end users on SLDS related toolsets.
- Development of software applications using ColdFusion or similar tool sets.
- Demonstrated ability to design and program user interfaces that meet a variety of needs.
- Work with outside entities to accomplish required data exchange policies and procedures.
- Data transformation around data models and data sharing agreements.
- The programmer will develop documentation for software projects to which he/she is assigned.
- The programmer will assist with the development of training sessions related to his/her scope of work.
- Other duties as assigned by the office director which are required to accomplish the goals of the Department of Education.

QUALIFICATIONS:

1. Bachelor's degree from an accredited college or university required.
2. Major/minor area of study in the area of computer science, mathematics, or a related field preferred.
3. Effective and accurate writing and oral communication skills are required.
4. Problem solving and critical thinking skills are required.
5. Ability to multi-task is required.
6. Work experience as a programmer, data analyst, or data base administrator is required.
7. Previous work experience with business intelligence tools such as IBM Cognos or Business Objects preferred.
8. Work experience with IBM iSeries, RPG, DB2/400, ColdFusion, SQL, and MicroSoft Excel preferred.

SALARY: \$44,751.06 annually

CLOSING: TBD

Candidates for employment must complete an official application form that may be obtained by contacting the Office of Human Resources at (304) 558-2702. The application may be downloaded at <http://wvde.state.wv.us/hr/>.

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Office of Human Resources
WV Department of Education
Building 6, Room 264
1900 Kanawha Blvd. East
Charleston, West Virginia 25305-0330
Phone: 304-558-2702
Fax: 304-558-0216
Email: lbryant@access.k12.wv.us

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Jorea M. Marple

Jorea M. Marple took over as West Virginia's 27th state superintendent of schools on March 1, 2011.

As superintendent, Marple oversees West Virginia's public school system, which includes 55 individual school districts, serving about 282,000 students in preschool through 12th grade.

Marple, who has a doctorate in education administration from West Virginia University, has more than 35 years of experience as a classroom teacher, reading specialist, university instructor, principal, assistant county superintendent, county superintendent, assistant state superintendent and deputy state superintendent. She earned her bachelor's degree in elementary education at Fairmont State and a master of arts in reading from WVU. She also is a published author on effective school leadership. Marple has experience in West Virginia schools in Marion, Monongalia, Greenbrier and Kanawha counties.

As a principal at Tiskelwah Elementary School in Kanawha County, she helped students significantly improve their standardized test scores, which earned Tiskelwah a National Blue Ribbon School distinction. As an assistant state superintendent and deputy state superintendent, she has helped guide the state's journey to create a responsive and accountable 21st century school system.

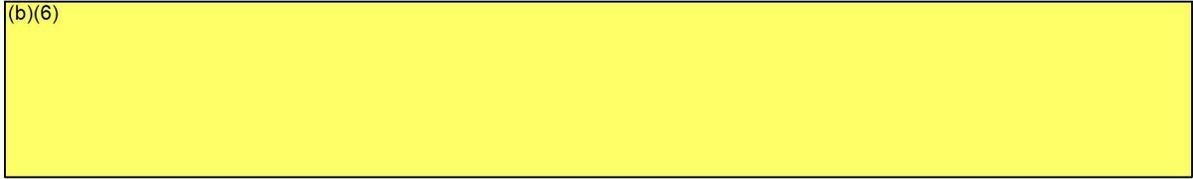
Her responsibilities have included working to create the state's 21st century learning program, "Global 21: Students deserve it. The world demands it." The plan, which has garnered West Virginia national and international attention, includes increased rigor and relevance and incorporates real-world learning and performance skills, such as problem solving and creative thinking, into state standards.

Marple also has been involved in the state Department of Education's work with pre-K programs, school technology implementation, school leadership development programs, reading initiatives and teacher quality efforts.

On the international front, Marple has been selected to participate in the Global Education Leaders Program. Based in London, the program's goal is to develop in-depth, sustainable transformation practices beyond the simple exchange of ideas.

Nationally, Marple served as a leader within the National Urban and Suburban School Association. She was invited to participate in both the Columbia and Harvard universities' superintendent academies. She has worked with the U.S. Department of Education, Partnership for 21st Century Skills, Council of Chief State School Officers, other state departments of education, the State Educational Technology Directors Association, the National Association of Test Directors, the National Association of Special Education Teachers and the National Staff Development Council. She also has been honored as a YWCA Woman of Achievement.

(b)(6)



Charles K. Heinlein

(b)(6)

EDUCATION:

- | | |
|--|------|
| West Virginia Institute of Technology
Bachelor of Arts- Social Studies Comprehensive | 1973 |
| University of Dayton
Master of Science-Educational Leadership | 1987 |

EXPERIENCE:

- | | |
|--|--------------|
| WEST VIRGINIA DEPARTMENT OF EDUCATION | |
| ▪ Deputy State Superintendent of Schools | 2011-Present |
| ▪ Executive Director, Office of School Improvement | 2009-2011 |
| ▪ Closing The Achievement Gap Liaison | 2006-2009 |
| ▪ Residential Director WV Institute for 21 st
Century Leadership | 2006-Present |
| St. Marys High School | |
| • Principal | 1998-2006 |
| Tyler Consolidated High/Middle School | |
| ▪ Dean of Academics | 1993-1994 |
| Sistersville High School | |
| ▪ Principal | 1986-1993 |
| ▪ Administrative Assistant and Athletic Director | 1983-1985 |
| ▪ Instructor | 1973-1985 |

PROFESSIONAL ACTIVITIES:

- | | |
|--|-----------|
| ▪ New Principals Orientation for West Virginia Department of Education,
Cedar Lakes | 2001 |
| ▪ Facilitator for RESA VII, "Gear Up" conference, Leadership component | 2000 |
| ▪ Keynote speaker for Teacher's Summer Institute, "Academic Rigor" | 2000 |
| ▪ Principalship Mentor for at risk schools through Center for Professional
Development | 2000 |
| ▪ West Virginia State Board of Education Accreditation Validation Team for
Lincoln County | 1999 |
| ▪ Keynote speaker, Fall Follow-Up Principal Academy, "Educational Marketing" | 1999 |
| ▪ Presenter, Milken Educator Conference, "Assessment Philosophy" | 1999 |
| ▪ Center for Professional Development Board | 1998-2003 |
| ▪ Director of Appalachian Regional Systemic Initiative Principal's Academy | 1998 |
| ▪ Team leader, West Virginia Principal's Academy | 1997-2003 |

- Co-author of policies, procedures, philosophy for Alternative School 1996-1997
- Worked with faculty to develop Senior Exhibition curriculum, format, and methodology 1994-1996
- Organizational development of Guidance Curriculum and administrative practices at new county consolidation 1993-1996
- Directed WVEIS operations at new consolidation 1993-1996
- Austin, Texas International Conference, "Transformational Outcome Based Education" 1992
- West Virginia Department of Education and the Center for Professional Development, "Evaluation Training" 1992
- Co-directed the Strategic Planning Process to develop curricular exit outcomes for grades 9-12 1992
- Developed concept for McDonough Summer Leadership Seminar for high school students in conjunction with Marietta College 1991-1992
- Tyler County New Teacher Induction Program, "Learning Styles and the Classroom Instructional Process," and "Checking for Understanding in the Instructional Process" 1989-1992
- APLII Trainer, "Tactics for Thinking" 1991
- School Leadership Seminar, "IBM Transformational Leadership" 1991
- Ohio University's "Democracy in Education" Conference Speaker 1991
- Governor's Town Meeting Facilitator 1990
- West Virginia University's Principalship Program Review Board 1990
- Developed "school within a school" organization format for Tyler County Consolidated High School 1990
- West Virginia SAT-Network, "Teacher Evaluation—Proofs in the Process" 1989
- West Virginia University, Department of Education, Superintendency Class Guest Lecturer, "Monitoring of Students, Programs, Staff, and the Implementation of a Database System for Participatory Management" 1988
- West Virginia Effective Schools Network Conference Presenter, "Effective School Research and Its Application as Sistersville High School" 1987
- Developed the first Parent University for parents and community members 1987
- Leaders of Learning Conference Presenter, "Effective School Research Applications at Sistersville High School—The Monitoring Correlate of Effective Schools" 1986

CONSULTATIVE WORK:

- Morgan County, "Standardized Test Data and Its Use" 1999
- Leaders of Learning, "Vision 2000—Tyler County" Aug 1995
- Gilmer County, "Three Day Workshop on use of Standardized Test Data" July 1995
- West Virginia Business Consortium, "Organizational Vision" Nov 1994
- Clay County, "Working with Standardized Test Data" Aug 1994
- Putnam County, "Countywide Student Leadership Workshop" Feb 1994
- West Virginia School Administrators, "Vision 2000—Tyler County" Jan 1994
- Putnam County, "Student Leadership and School Culture" Jan 1994
- Putnam County Student Leadership Workshop Nov 1993
- Lewis County, "Working with Standardized Test Scores" Aug 1993
- Putnam County, "Project 2000 in Tyler County" May 1993
- Boone County, "School Culture: Vision, Mission, Purpose" Mar 1993
- West Virginia University Educational Administration Program, "Mission—Vision—Purpose" Nov 1992

- West Virginia Education Fund: Business/School Partnerships, "School Culture and Leadership" Sept 1992
- Jackson County, "School Culture and Leadership" Aug 1992
- Lincoln County, "School Culture and Leadership" Aug 1992
- Upshur County, "Disaggregation of Standardized Test Scores" Aug 1992
- West Virginia Department of Education's School Institute, "Outcome Based Education" July 1992
- Principals' Academy Spring Follow-Up, "Outcome Based Education" April 1992
- Frontier Local School District, "Standardized Achievement Tests and Methods of Intervention" 1991-1992
- Putnam County School Improvement Council Training, "Measuring Success and Setting Improvement Goals" July 1991
- Jefferson County Principals' Training, "Vision, Mission, Purpose," and "Assessment of Student Achievement and Methods of Intervention" Aug 1990
- Ritchie County Teachers, "Correlates of Effective Schools" Aug 1990
- West Virginia Principals' Academy, "Use of Aggregate Data to Develop Base Line Data" July 1990
- Ritchie County Principals' Seminar, "Disaggregating Achievement Data" April 1990
- Marshall County Principals' Training, "Teacher Empowerment, Involvement, and Student Ownership" Oct 1989
- Barbour County Schools, "Factors Affecting Achievement Scores and Curriculum Alignment as a Means of Intervention" Aug 1989
- West Virginia Principals' Academy, "The Monitoring Process" July 1987

PROFESSIONAL RECOGNITION:

- Higher Education Committee on Financial Aid 2002
- West Virginia Department of Education Leaders of Learning in West Virginia 2001
- Principals' Standards Advisory Board 1996
- Member of Governor's Technology Task Force 1996
- Milken Educator 1995
- Sistersville Jaycees Outstanding Educator 1990
- West Virginia University Review Committee of the Principal Preparation Program 1990
- Governor's Honors Academy Advisory Council 1988, 1989
- Holmes' Group Representative for West Virginia University at Holmes' Group Conference in Washington, D. C. 1988
- Nominated as one of the "Effective Instructional Leaders of West Virginia" to the ASCD by West Virginia University 1988

PROFESSIONAL AFFILIATIONS:

- Association for Supervision and Curriculum Development
- National Association of Secondary School Principals
- West Virginia Association of Secondary School Principals
- West Virginia Association for Supervision and Curriculum Development (Treasurer, 1988)

Richard L. Pullin Jr.

Objective: To utilize the experience I have received at all three levels of the education system including the county level, the regional level and presently the state level with WVEIS and continue to help others benefit from technology and its potential.

Summary of Qualifications: Over 18 years experience with technology and education. Extensive experience with the WVEIS project, in terms of development, support, training, financial aspects and helping take WVEIS to the next level of ability. Excellent analytical skills, communication skills, and business skills through my Bachelor's degree at Marshall University, as well as the professional and leadership positions I have held. My background includes system development skills, including programming; web development; network structure and implementation; training; technical support; federal, state and local data requests; third party vendor application issues; security; and data protection. Excellent people skills and a team player by instinct.

Employment: **WV Department of Education** **July 2007 – Present**
Charleston, WV

Coordinator, WVEIS

- Assist and share lead responsibility for the development of the web based WVEIS applications.
- Work with programmers to correct errors found in programs and in the development of new programs to meet the needs of the users.
- Provide training and support to RESA Staff for WVEIS and related software used with the project.
- Work with other members of our staff to ensure that WVEIS data is used properly, accurately and efficiently.
- Work with other departments to see that WVEIS data is utilized and helpful when applicable. Develop new programs and processes that help meet these needs.
- Provide phone support, online support and training to all counties and RESA's in regards to the use of

WVEIS and related applications.

**Employment:
(Continued)**

Cabell County Schools
Huntington, WV

Aug. 2000 – July 2007

Computer Information Systems Coordinator

- Responsible for the support and training of all WVEIS modules including finance, payroll, personnel, fixed assets, student management (grading, scheduling, attendance, etc), special education, etc.
- Responsible for evaluating and automating tasks in departments using WVEIS or computerized data.
- Administer and responsible for e-School Solutions automated employee/substitute calling system.
- Assist Finance Department in regular tasks such as month end closing, new year setup, financial year end closing, W-2's, PEIA, etc.
- Communicate, distribute and remain knowledgeable of all WVEIS state network correspondence.
- Analyze and develop automation where applicable to improve productivity and efficiency related to information systems.

Putnam County Schools
Winfield, WV

Feb. 1995 - Aug. 2000

Computer Information Systems Coordinator

- Responsible for the support and training of WVEIS for finance, payroll, personnel, fixed assets, student management, special education, etc.
- Responsible for evaluating and automating tasks in departments using WVEIS or computerized data.
- Assist Finance Department in regular tasks such as month end closing, new year setup, financial year end closing, W-2's, PEIA, etc.
- Implement and supervise all WVEIS state network issues and upgrades.
- Analyze and develop automation where applicable to improve productivity and efficiency related to information systems.

Employment: **Regional Education Service Agency II July 1993 - Feb. 1995**
(Continued) Huntington, WV

Director of Computer Information Systems

- Assisted in the design stage and implementation of the WVEIS state network for six counties.
- Provided application training and support in all areas including finance, payroll, personnel, fixed assets, warehousing, school administration, etc.
- Supervised and administrated an IBM AS/400 mainframe network for the region.
- Supervised, evaluated and re-structured data processing staff personnel.

Education: **Marshall University** **Graduated May 1993**
Huntington, WV

Degree: Bachelor of Business Administration
Major Concentrate: Computer Information Systems
Minor Concentrate: Accounting

Other Affiliations Treasurer - Eleanor Fire Department July 2001 – July 2006
Activities: Responsible for all federal, state, county & local funding and grants.

Owner - YBIL Web Design Feb. 2002 – Jan. 2010
Provides web applications & services businesses & organizations.

References: Available upon request.

Appendix D

West Virginia SLDS Acronym List

CSPR	Consolidated State Performance Report
DGC	Data Governance Committee
DGM	Data Governance Manager
DP-21	Data Portal for 21 st Century Success
DPC	Data Policy Committee
DSTT	Data Steward Task Team(s)
ESEA	Elementary and Secondary Education Act
ETL	Extract, Transform, and Load process
FAQ	Frequently Asked Questions
FERPA	Federal Educational Rights and Privacy Act
FTE	Full-Time Equivalency
IDEA	Individuals with Disabilities Education Act
K-12	Kindergarten through Grade 12
LEA	Local Education Agency
NDAs	Non-Disclosure Agreements
OIS	Office of Information Systems (West Virginia Department of Education)
P-12	Pre-K through Grade 12
P-20	Pre-K through Adult
RESAs	Regional Education Service Agencies
SEA	State Education System
SIS	Student Information System
SLDS	State Longitudinal Data System
SQL	Structured Query Language
WoW	WVEIS on the Web
WVDE	West Virginia Department of Education
WVEIS	West Virginia Educational Information System

Budget Narrative File(s)

* Mandatory Budget Narrative Filename:

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

Development of a Comprehensive State Longitudinal Data System for West Virginia Public Schools

Budget Narrative

Contents

Introduction	2
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Introduction

With funding from this SLDS grant, the West Virginia Department of Education (WVDE) will build a comprehensive longitudinal data system that will

- Establish a clear data governance structure that supports the alignment of data elements with national data standards and a set of critical research/policy questions that serve stakeholders' needs at the local, regional, and state levels
- Provide a series of data quality assurances for critical data elements, including automated toolsets and a strong data stewardship program, that will contribute to a statewide culture of data quality and provide rigorously validated source data for the state's P-20 data system
- Provide access to data in a role-based and secure environment that meets the diverse data needs of each user group while protecting the data's privacy
- Provide resources to develop concrete materials and conduct comprehensive professional development that support effective use of the new SLDS
- Leave West Virginia with a sustainable set of products and a structure that allows the WVDE to maintain the SLDS as the authoritative source for P-12 information and as a decision-making engine for education stakeholders

Budget Summary for Grant-Funded Personnel

The following section details the costs associated for those positions funded through the SLDS grant, representing both salary and fringe costs. For ease of reading and review, these grant-funded personnel are presented before the deliverable breakdowns and prior to estimating their cost by deliverable. Please note, the section “Deliverable Costs” breaks down the costs for grant-funded personnel by deliverable.

Grant-Funded Personnel by Year

Itemized Resources by Federal Fiscal Year	Year 1 2012-2013	Year 2 2013-2014	Year 3 2014-2015	TOTAL*
Personnel	\$ 180,629.74	\$ 522,485.46	\$ 522,485.46	\$ 1,225,600.66
Data Governance Manager (1 FTE) 261 days @ \$312.26/day	\$81,499.86	\$81,499.86	\$81,499.86	\$244,499.58
SLDS Project Manager (.50 FTE) 130.5 days @ \$277.96/day	\$36,273.78	\$36,273.78	\$36,273.78	\$108,821.34
SLDS Secretary (Office of Information Systems) (1 FTE) 261 days @ \$108.45/day	\$28,305.45	\$28,305.45	\$28,305.45	\$84,916.35
SLDS Secretary (Office of Research) (1 FTE) 261 days @ \$108.45/day	\$28,305.45	\$28,305.45	\$28,305.45	\$84,916.35
SLDS Curriculum Specialist (1 FTE) 261 days @ \$230.10/day	\$0	\$60,056.10	\$60,056.10	\$120,112.20
SLDS Curriculum Specialist (1 FTE) 261 days @ \$230.10/day	\$0	\$60,056.10	\$60,056.10	\$120,112.20
SLDS Curriculum Specialist (1 FTE) 261 days @ \$230.10/day	\$0	\$60,056.10	\$60,056.10	\$120,112.20
SLDS Curriculum Specialist (1 FTE) 261 days @ \$230.10/day	\$0	\$60,056.10	\$60,056.10	\$120,112.20
SLDS-SIS Programmer (1 FTE) 261 days @ \$257.19/day	\$0	\$67,126.59	\$67,126.59	\$134,253.18
SLDS Evaluation Coordinator (.50 FTE) 20 days (yr.1), 130.5 days (yr.2 and yr. 3) @ \$312.26/day	\$6,245.20	\$40,749.93	\$40,749.93	\$87,745.06
Fringe (Calculated @ 30.05% salary)	\$54,279.24	\$157,006.88	\$157,006.88	\$368,293.00
Data Governance Manager	\$24,490.71	\$24,490.71	\$24,490.71	\$73,472.13
SLDS Project Manager	\$10,900.27	\$10,900.27	\$10,900.27	\$32,700.81
SLDS Secretary (Office of Information Systems)	\$8,505.79	\$8,505.79	\$8,505.79	\$25,517.36
SLDS Secretary (Office of Research)	\$8,505.79	\$8,505.79	\$8,505.79	\$25,517.36
(4) SLDS Curriculum Development Specialists	\$0	\$72,187.43	\$72,187.43	\$144,374.86
SLDS –SIS Programmer	\$0	\$20,171.54	\$20,171.54	\$40,343.08
SLDS Evaluation Coordinator	\$1,876.68	\$12,245.35	\$12,245.35	\$26,367.38
TOTAL Personnel and Fringe	\$234,908.98	\$679,492.34	\$679,492.34	\$1,593,893.66

*Note: Totals may not reflect exact sums due to fractions of cents and rounding.

Key Personnel (SLDS Funded)

- The **Data Governance Manager** (1.0 FTE) will be funded entirely through the SLDS grant. During the project, the WVDE will request funding from the state legislature to support the position in future years. The Data Governance Manager will work across Deliverables 1, 2, and 3 at 40%, 20%, and 40% of his or her time, respectively. The Data Governance Manager will be responsible for developing the governance plan and structure, serving as the data governance liaison, overseeing work scopes for Data Steward Task Teams, overseeing the work of the programmers, overseeing and contributing to the RFP development, and providing oversight to data access and data use needs. The Data Governance Manager will be employed for 261 days (1.0 FTE) for each year, at a total cost of \$317,971.70 (\$244,499.58 salary + \$73,472.12 fringe).
- The **SLDS Project Manager** will be funded through the SLDS grant for a total of (b) (6) FTE per project year. The Project Manager will distribute her allocated time evenly across Deliverables 1, 2, and 3 (i.e., 33% per Deliverable). Sara Kitts, Coordinator, Office of Information Systems, will serve as the Project Manager for a total cost of \$141,522.15 (\$108,821.34 salary + \$32,700.81 fringe). Her experience with the current Office of Information Systems' projects and with project management makes her an excellent choice for this position.
- Two full-time **SLDS Secretaries** (2.0 FTE) will be hired and funded entirely by the SLDS grant. The SLDS Secretaries will be housed across two offices to support the work of the SLDS. One will be housed in the Office of Information Systems and will provide support services to the Data Governance Manager and four Curriculum Development Specialists. The other will be housed in the Office of Research and will support the SLDS Evaluation Coordinator.
 - The Secretary in the Office of Information Systems will devote 40%, 40%, and 20% (respectively, for each year) of his or her time to Deliverables 1, 2, and 3. This individual will be employed for 261 days (1.0 FTE) for each year, for a total cost of \$110,433.71 (\$84,916.35 salary + \$25,517.36 fringe).
 - The Secretary in the Office of Research will devote 10%, 10%, and 80% (respectively, for each year) of his or her time to Deliverables 1, 2, and 3. Until the SLDS Evaluation Coordinator is hired, this person will assist with the in-kind evaluation efforts, justifying a full 1.0 FTE in Year 1. The Office of Research Secretary will be employed for 261 days (1.0 FTE) for each year, for a total cost of \$110,433.71 (\$84,916.35 salary + \$25,517.36 fringe).
- The four **SLDS Curriculum Development Specialists** (4.0 FTE) will be funded entirely through the SLDS grant. They will support Deliverable 3. This is one of two funded positions that are limited to a single deliverable (see SLDS Evaluation Coordinator). The four SLDS Curriculum Development Specialists will be employed for 261 days each for Years 2 and 3 of the grant, for a total cost of \$624,823.66 (\$480,448.80 salary + \$144,374.86 fringe).

- The **SLDS-SIS Programmer** (1.0 FTE) will be funded entirely through the SLDS grant. This programmer will work across Deliverables 2 and 3 at 25% and 75% of his or her time, respectively. The Programmer will be responsible for liaising between the transactional SIS and SLDS, working with the vendor, learning and teaching others about the selected tools, and customizing and building reports. The Programmer will be employed for 261 days (1.0 FTE) for Years 2 and 3, at a total cost of \$174,596.26 (\$134,253.18 salary + \$40,343.08 fringe).
- The **SLDS Evaluation Coordinator** (.50 FTE) will be funded through the SLDS grant for a total of .50 FTE per project year. The Evaluator will devote 100% of his or her allocated time to Deliverable 3. The Evaluator will be employed for 2 months in Year 1 and for all months in Years 2 and 3, for a total cost of \$114,112.45 (\$87,745.06 salary + \$26,367.39 fringe).

Deliverable Costs

The following breaks down the costs by deliverable for personnel, travel, equipment, supplies, contractual, and indirect.

Deliverable 1 Establish SLDS Formal Governance and Policy Requirements

Estimated Total Cost – \$275,846.40

Key Personnel (SLDS Funded)

- **Data Governance Manager** (1.0 FTE) will dedicate 40% of his or her time to this outcome. The Data Governance Manager will oversee the development of the governance plan, facilitate meetings with stakeholder groups and Data Stewards, and serve as the data governance liaison for all data governance issues. Managing these tasks associated with Deliverable 1 will account for approximately 104.4 days per year, for a total cost \$127,188.68 (\$97,799.83 salary + \$29,388.85 fringe).
- **SLDS Project Manager** (b)
(6) FTE) Sara Kitts, Coordinator, Office of Information Systems, will allocate 33% of her (b)
(6) FTE to Deliverable 1. She will be assigned to SLDS project management, which will be a shared responsibility with the Data Governance Manager supporting all tasks associated with Deliverable 1. Managing these tasks will account for approximately 43.5 days per year, for a total cost of \$47,174.05⁷ (\$36,273.78 salary + \$10,900.27 fringe).
- Two full-time **SLDS Secretaries** (2.0 FTE) will be hired and funded entirely by the SLDS grant but will vary their allocated time by deliverable.
 - The Secretary in the Office of Information Systems will provide support services to the Data Governance Manager and four Curriculum

Development Specialists and devote 40% of his or her time to this deliverable. This accounts for approximately 104.4 days per year, for a total cost of \$44,173.49 (\$33,966.54 salary + \$10,206.95 fringe).

- The Secretary in the Office of Research will support the SLDS Evaluation Coordinator. During the first year of the project, this secretary will support the in-kind evaluation efforts of the office and will transition to support the SLDS Evaluation Coordinator fully. The Secretary in the Office of Research will devote 10% of his or her time to this deliverable. This accounts for approximately 26.1 days per year for a total cost of \$11,043.37 (\$8,491.64 salary + \$2,551.74 fringe).

Key Personnel (In-Kind Contributions)

The estimated in-kind contribution for Deliverable 1 is based upon an average salary of a WVDE Assistant Director (approximately \$313/day) because multiple positions (at various levels) will be required to contribute to the successful completion of Deliverable 1. The in-kind contribution of Deliverable 1 is estimated at (b)(4). This includes a 30% fringe rate applied to each estimated in-kind cost per day. In-kind personnel will comprise representation from WVDE leadership, three LEAs, one Regional Education Service Agency, and 25 WVDE offices. These staff members will serve on the Data Policy Committee, the Data Governance Committee, and the Data Steward Task Teams (as key staff, they also will support data governance in various other ways):

- **Jorea M. Marple, State Superintendent of Schools.** The state superintendent will serve on the Data Policy Committee. Her representation will be on an as-needed basis.
- **Charles Heinlein, Deputy Superintendent of Schools.** The deputy superintendent will serve on the Data Policy Committee. His representation will be on an as-needed basis.
- **Robert Hull, Associate Superintendent of Schools.** The associate superintendent will serve on the Data Governance Committee. His representation will be on an as-needed basis.
- **Marshall Patton, Executive Director, Office of Information Systems (.10 FTE).** 33% of his allocated time will be devoted to Deliverable 1. He has primary oversight for all WVDE information systems initiatives, including transactional data systems used by LEAs. He will serve on the Data Governance Committee and Data Policy Commission and will work closely with the SLDS Steering Committee, Data Governance Manager, and SLDS Project Manager.
- **Randall Kirk, Assistant Director, Office of Information Systems (.10 FTE).** 33% of his allocated time will be devoted to this deliverable. He is responsible for internal software development and database design. He will be an integration specialist for the SLDS and will serve on the Data Governance Committee and the SLDS Steering Committee.
- **Malinda Shanklin, Coordinator, Office of Information Systems (.10 FTE).** 20% of her allocated time will be devoted to this deliverable. She serves as the WVDE's EdFacts Coordinator and has more than 20 years of experience with West Virginia's SIS. She will be a database content specialist for the SLDS and

serve on the SLDS Steering Committee. She will also play an integral role with creating the data model and the data dictionary (please see Deliverable 2).

- **Nate Hixson, Assistant Director, Office of Research (.05 FTE).** 60% of his allocated time will be devoted to this deliverable. He is a lead researcher and currently oversees research projects for the WVDE. He will be a research needs specialist for the SLDS and serve on the Data Governance Committee and the SLDS Steering Committee.
- **Juan D’Brot, Executive Director, Office of Assessment (.05 FTE).** 60% of his allocated time will be devoted to this deliverable. He oversees all statewide assessment initiatives. He will be a content and reporting advisor for the SLDS and serve on the Data Governance Committee and the SLDS Steering Committee.
- **Sherri Goodman, Staff Attorney, Office of Legal Services (.05 FTE).** 100% of her allocated time will be devoted to this deliverable. She has served as the WVDE’s legal counsel during the state’s P-20 longitudinal data system project and will serve in a similar capacity for the P-12 SLDS. In addition, she will serve in an advisory role to the Data Governance Manager and the Data Policy Committee.

Grant-Funded Personnel: Deliverable 1

Deliverable 1: Establish SLDS Formal Governance and Policy Requirements	Year 1 2012-2013	Year 2 2013-2014	Year 3 2014-2015	TOTAL*
Personnel	\$58,843.93	\$58,843.93	\$58,843.92	\$176,531.79
Data Governance Manager 40% of 1 FTE 261 days @ \$312.26/day (\$81,499.86)	\$32,599.94	\$32,599.94	\$32,599.94	\$97,799.83
SLDS Project Manager 33.3% of (b)(6) FTE 130.5 days @ \$277.96/day (\$36,273.78)	\$12,091.26	\$12,091.26	\$12,091.26	\$36,273.78
SLDS Secretary (Office of Information Systems) 40% of 1 FTE 261 days @ \$108.45/day (\$28,305.45)	\$11,322.18	\$11,322.18	\$11,322.18	\$33,966.54
SLDS Secretary (Office of Research) 10% of 1 FTE 261 days @ \$108.45/day (\$28,305.45)	\$2,830.55	\$2,830.55	\$2,830.54	\$8,491.64
Fringe (Calculated @ 30.05% salary)	\$17,682.60	\$17,682.60	\$17,682.60	\$53,047.80
Data Governance Manager 40% of 1 FTE	\$9,796.28	\$9,796.28	\$9,796.28	\$29,388.85
SLDS Project Manager 33.3% of (b)(6) FTE	\$3,633.42	\$3,633.42	\$3,633.43	\$10,900.27
SLDS Secretary (Office of Information Systems) 40% of 1 FTE	\$3,402.32	\$3,402.32	\$3,402.31	\$10,206.95
SLDS Secretary (Office of Research) 10% of 1 FTE	\$850.58	\$850.58	\$850.58	\$2,551.74
Total Personnel (Salary + Fringe)	\$76,526.53	\$76,526.53	\$76,526.52	\$229,579.59

*Note: Totals may not reflect exact sums due to fractions of cents and rounding.

Travel

Travel associated with Deliverable 1 is estimated to cost \$21,000:

- A comprehensive Data Governance Committee, consisting of a revolving representation of key P-12 stakeholders and Data Stewards from each contributing WVDE office and/or each regional/local education agency, will convene monthly meetings to meet the deliverables of this outcome. While the majority of these meetings will be conducted via teleconference, quarterly meetings will be held in a face-to-face format. Travel for three LEA representatives and one regional representative to attend these quarterly meetings will be covered by the SLDS funding, based on 16 total days per year at \$300/day, for a total cost of \$4,800/year x 3 years = \$14,400.
- The total anticipated travel expense also includes required travel—SLDS grant project meeting in Washington, DC—for the Data Governance Manager and Project Manager per year for each of the three years of the grant. This cost is estimated at \$300/day per person (2) x 2 days (based on the per diem rate from GSA) with an expected cost of \$500 per airline, for a total cost of \$2,200/year x 3 years = \$6,600.

Equipment

The equipment costs for Deliverable 1 are estimated to be \$5,500.

- Three new positions will be funded with grant funds from the SLDS as part of this deliverable. As such, the estimated costs for computer workstations and peripherals, such as printers, are included above—all covered by grant funds. The costs per staff person vary based on occupational need (e.g., laptop vs. desktop).
- Technology equipment costs for Sara Kitts are not requested because she is an existing employee.

Supplies

The supply costs for Deliverable 1 are estimated to be \$1,000.

- Most communications and publications related to this deliverable will be web based and covered with existing technologies and in-kind funding. However, there will be minimal expected printing costs (\$1,000) for the sustainability roadmap and related documents—all covered by grant funds.

Contractual

There are no associated contractual costs for Deliverable 1. No contracted service providers will participate in the data governance activities.

Indirect Costs

The indirect cost for Deliverable 1 is estimated to be \$18,766.81:

- WVDE is required to include indirect costs as part of the SLDS grant budget.

- WVDE’s indirect costs are calculated at 7.3% (federally negotiated rate) of the direct costs of the grant. The total direct costs associated with Deliverable 1 are estimated to be \$257,079.59, for a total of \$257,079.59 x 7.3% = \$18,766.81.
- No contractual costs need to be accounted for in the indirect costs for Deliverable 1.

Deliverable 1: Establish SLDS Formal Governance and Policy Requirements	Year 1 2012-2013	Year 2 2013-2014	Year 3 2014-2015	TOTAL*
Travel				\$21,000.00
4 Members of Data Governance Committee (Quarterly Meetings) 16 days @ \$300.00/day	\$4,800.00	\$4,800.00	\$4,800.00	\$14,400.00
SLDS Project Manager (Required National Meetings) 2 Days @ \$300.00/day Plus Airline (\$500.00)	\$600.00 \$500.00	\$600.00 \$500.00	\$600.00 \$500.00	\$1,800.00 \$1,500.00
Data Governance Manager (Required National Meetings) 2 Days @ \$300.00/day Plus Airline (\$500.00)	\$600.00 \$500.00	\$600.00 \$500.00	\$600.00 \$500.00	\$1,800.00 \$1,500.00
Equipment				\$5,500.00
Technology (3 workstations including computers/printers and peripheral) for new FTEs	\$5,500.00	\$0	\$0	\$5,500.00
Supplies				\$1,000.00
Printing for sustainability roadmap	\$0	\$0	\$1,000.00	\$1,000.00
Contractual (none)				\$0
Indirect Costs 7.3% Direct Costs (\$257,079.59)				\$18,766.81

*Note: Totals may not reflect exact sums due to fractions of cents and rounding.

Deliverable 2
Address Technical Requirements Related to Key Data Elements in the SLDS

Estimated Total Cost – \$427,063.42

The majority of the work associated with Deliverable 2 will be completed by Data Steward Task Teams.

Key Personnel (SLDS Funded)

- **Data Governance Manager** (1.0 FTE) will dedicate 20% of his or her allocated time to Deliverable 2, establishing and overseeing work scopes for the Data Steward Task Teams and overseeing the work of the contracted programmers and the SLDS-funded programmer. The tasks associated with Deliverable 2 will account for approximately 52.2 days per year, for a total cost of \$63,594.34 (\$48,899.92 salary + \$14,694.42 fringe).
- **SLDS Project Manager** (0.5 FTE) Sara Kitts, Coordinator, Office of Information Systems, will dedicate 33% of her allocated time to this deliverable, working with the contracted programmers and the SLDS-funded programmer, overseeing the in-kind work contributed by OIS staff, and coordinating with Data Steward Task Teams. Managing these tasks will account for approximately 43.5 days per year, for a total cost of \$47,174.05 (\$36,273.78 salary + \$10,900.27 fringe).
- Two full-time **SLDS Secretaries** (2.0 FTE) will be hired and funded entirely by the SLDS grant but will vary their allocated time by deliverable.
 - The Secretary in the Office of Information Systems will provide support services to the Data Governance Manager, Project Manager, Data Steward Task Teams, and programmers. The OIS secretary will devote 40% of his or her time to Deliverable 2. This will account for approximately 104.4 days per year, for a total cost of \$44,173.49 (\$33,966.54 salary + \$10,206.95 fringe).
 - The Secretary in the Office of Research will support the SLDS Evaluation Coordinator. For this deliverable, the secretary will support the Evaluator during implementation monitoring. The Secretary in the Office of Research will devote 10% of his or her time to this deliverable. This will account for approximately 26.1 days per year, for a total cost of \$11,043.37 (\$8,491.64 salary + \$2,551.74 fringe).
- **SLDS-SIS Programmer** (1.0 FTE) will dedicate 25% of his or her allocated time to Deliverable 2, functioning as the liaison between the transactional SIS and the SLDS. Managing this task will account for approximately 65.25 days per year in Years 2 and 3 of the grant, for a total cost of \$43,649.07 (\$33,563.30 salary + \$10,085.77 fringe).

Deliverable 2: Address Technical Requirements Related to Key Data Elements in the SLDS	Year 1 2012-2013	Year 2 2013-2014	Year 3 2014-2015	TOTAL* \$427,063.42
Personnel	\$42,543.96	\$ 59,325.61	\$ 59,325.61	\$161,195.17
Data Governance Manager 20% of 1 FTE (52.2 days/year @ \$312.26/day) 261 days @ \$312.26/day (\$81,499.86)	\$16,299.97	\$16,299.97	\$16,299.97	\$48,899.91
SLDS Project Manager 33.3% of (b)(6) FTE (43.5 days/year @ \$277.96/day) 130.5 days @ \$277.96/day (\$36,273.78)	\$12,091.26	\$ 12,091.26	\$ 12,091.26	\$ 36,273.78
SLDS Secretary (Office of Information Systems) 40% of 1 FTE (104.4 days/year @ \$108.45/day) 261 days @ \$108.45/day (\$28,305.45)	\$11,322.18	\$11,322.18	\$11,322.18	\$33,966.54
SLDS Secretary (Office of Research) 10% of 1 FTE (26.1 days/year @\$108.45/day) 261 days @ \$108.45/day (\$28,305.45)	\$2,830.55	\$2,830.55	\$2,830.55	\$8,491.65
SLDS –SIS Programmer 25% 1.0 FTE (65.25 days/year @ \$257.19/day) 261 days @\$257.19/day (\$67,126.59)	\$0	\$16,781.65	\$16,781.65	\$33,563.30
Fringe (Calculated @ 30.05% salary)	\$12,784.46	\$17,827.35	\$17,827.35	\$48,439.15
Data Governance Manager 20% of 1 FTE	\$4,898.14	\$4,898.14	\$4,898.14	\$14,694.42
SLDS Project Manager 33.3% of (b)(6) FTE	\$3,633.42	\$3,633.42	\$3,633.42	\$10,900.27
SLDS Secretary (Office of Information Systems) 40% of 1 FTE	\$3,402.32	\$3,402.32	\$3,402.32	\$10,206.95
SLDS Secretary (Office of Research) 10% of 1 FTE	\$850.58	\$850.58	\$850.58	\$2,551.74
SLDS –SIS Programmer 25% 1.0 FTE	\$0	\$5,043	\$5,043	\$10,085.77
Total Personnel (Salary+ Fringe)	\$55,328.42	\$ 77,152.96	\$ 77,152.96	\$209,634.31

*Note: Totals may not reflect exact sums due to fractions of cents and rounding.

Key Personnel (In-Kind)

The in-kind personnel costs associated with Deliverable 2 are estimated to be (b)(4)

- **Malinda Shanklin, Coordinator, Office of Information Systems (.10 FTE).**
For Deliverable 2, she will dedicate 65 days, 10 days, and 10 days to the project each respective year, creating a data model of the transactional SIS to guide the Data Governance Committee in the development of the SLDS data dictionary.

The model will be developed in Year 1 and revised to reflect the interactions between the SIS and SLDS in Years 2 and 3.

- **OIS Staff** will provide an additional 10 days, 32.5 days, and 15 days (respectively, in Years 1-3) toward Deliverable 2 to help the vendor develop the SLDS data dictionary, which will include all the critical data elements that address research/policy questions and federal/state reporting requirements.

Sherri Goodman (.05 FTE) will dedicate 10 days of her allocated time to Deliverable 2 in Year 2, reviewing data-sharing agreements.

- The **Data Governance Committee** members will devote 10 days of work to Deliverable 2, developing a data stewardship role definition and access document.

Travel

Travel associated with Deliverable 2 is estimated to cost \$9,600:

- OIS will deliver a set of trainings (see Deliverable 3) to ensure high-quality data entry and data validation among transactional users. The total anticipated travel expense for these trainings accounts for two trainers traveling to the eight Regional Education Service Agencies (RESAs) at a cost of \$300 per day per person per year. Each RESA-based training will be a summit facilitated by OIS staff members. It is expected these trainings will occur in Years 1 and 2 of the grant.

Equipment

There are no expected equipment costs for Deliverable 2 because contract programmers and in-kind staff will have their own equipment. The technology needs of grant-funded staff have already been accounted for in Deliverables 1 and 3.

Supplies

There are no expected supply costs because there are no printed outputs or needed supplies to support Deliverable 2.

Contractual

The contractual costs associated with Deliverable 2 are estimated to be \$190,000.00:

- The OIS Executive Director will identify contractual staff to work with the Data Governance Manager and Project Manager on Deliverable 2. It is estimated that the contractual amounts will be \$47,500, \$95,000, and \$47,500 (respectively, Years 1-3). These costs will be aligned with FTEs of .375, .75, and .375 across the three years. These programmers will establish revised business rules for data entry, validation, collection, sharing, and reporting. In addition, they will validate LEA submissions and help develop professional development materials, which will assist transactional users with the data validation process for critical data elements. They will work with trainers to roll out these trainings and with the

SLDS vendor (see Deliverable 3) to secure data exchange tools. They also will create and implement the embedded training modules that deliver best practices to transactional users.

Indirect Costs

The indirect is estimated to be \$17,829.10 for Deliverable 2:

- WVDE’s indirect costs are calculated at 7.3% (federally negotiated rate) of the direct costs of the grant. The total direct costs associated with Deliverable 2 are estimated to be \$409,234.31 (\$190,000 of which are contractual costs). As such, Deliverable 2 includes \$219,234.31 in non-contractual direct costs x 7.3% = 16,004.10 in non-contractual indirect costs.
- Indirect costs can be applied only to the first \$25,000 of the expected contractual costs. As such, the indirect costs for contractual services are estimated to be \$1,825.00 for Deliverable 2, for a total of \$16,004.10 + \$1,825.00 = \$17,829.10.

Deliverable 2: Address Technical Requirements Related to Key Data Elements in the SLDS	Year 1 2012-2013	Year 2 2013-2014	Year 3 2014-2015	TOTAL*
Travel				\$9,600.00
(2) OIS Staff Trainers X (8) RESA one day PD = 16 days @ \$300.00/day	\$4,800.00	\$4,800.00	\$0.00	\$9,600.00
Equipment				\$0
Supplies				\$0
Contractual				\$190,000.00
Contracted Support for Data Governance Manager and Project Manager Aligned with FTEs of .375, .75, and .375 across the three project years	\$47,500.00	\$95,000.00	\$47,500.00	\$190,000.00
Indirect Costs 7.3% Direct Costs				\$17,829.10
Direct Costs (\$409,234.31)				\$16,004.10
Contractual Budget (7.3% of the first \$25,000 of the contractual amount \$190,000.00)				\$1,825.00

*Note: Totals may not reflect exact sums due to fractions of cents and rounding.

Deliverable 3
Promote Access and Use of Data from SLDS

Estimated Total Cost – \$4,095,787.63

The majority of the work associated with Deliverable 3 will be to develop and award an RFP and train stakeholders on data access and use.

Key Personnel (SLDS Funded)

The personnel costs associated with Deliverable 3 are estimated to be \$913,532.38:

- **Data Governance Manager** (1.0 FTE) will dedicate 40% of his or her allocated time to Deliverable 3, overseeing and contributing to all aspects of the RFP and selection process for the SLDS vendor. The manager will work closely with the selected SLDS vendor to ensure the system’s visualizations and associated professional development materials meet the needs identified by the Data Governance Committee. In conjunction with the Project Manager, the Data Governance Manager will also verify and provide oversight regarding the completion of Goal 3 milestones. The responsibilities associated with Deliverable 3 will account for approximately 104.4 days per year, for a total cost of \$127,188.68 (\$97,799.83 salary + \$29,388.85 fringe).
- **SLDS Project Manager** ((b)(6) FTE) Sara Kitts, Coordinator, Office of Information Systems, will dedicate 33% of her allocated time to this deliverable, verifying and providing oversight regarding the completion of Deliverable 3 milestones. She will also be closely involved with developing the RFP and selecting the vendor. Managing these tasks will account for approximately 43.5 days per year, for a total cost of \$47,174.05 (\$36,273.78 salary + \$10,900.27 fringe).
- The four **SLDS Curriculum Development Specialists** (4.0 FTE) will dedicate 100% of their time to this deliverable (funding 4.0 FTE for two years for a total of 1,044 days per year). The SLDS Curriculum Development Specialists will be housed in the OIS and will provide training to regional/local SLDS users to support their understanding of how to use the data. These specialists will be trained by the vendor to provide end users with general navigation training and will work closely with WVDE office staff to identify best training practices and develop training materials and resources to support data interpretation, application, and analysis to promote data-driven decision making among users. Finally, the Curriculum Development Specialists will work with the Secretaries, Steering Committee, and other SLDS staff to maintain SLDS capacity building and training efforts. The total cost for these positions is estimated to be \$624,823.66 for Years 2 and 3 (\$480,448.80 salary + \$144,374.86 fringe) for Years 2 and 3.
- **SLDS-SIS Programmer** (1.0 FTE) will dedicate 75% of his or her allocated time to this deliverable, working closely with the vendor during the SLDS

development, learning about the selected toolset, training internal staff on customizing reports, and building new reports as needed. The Programmer will allot 195.8 days for Years 2 and 3 at an estimated cost of \$130,947.20 (\$100,689.89 salary + \$30,257.31 fringe) for this deliverable.

- **SLDS Evaluation Coordinator** (.50 FTE) will dedicate 100% of his or her allocated time to Deliverable 3, developing a project evaluation design, documenting the initial implementation (e.g., RFP development and award, early professional development delivery), monitoring the formative progress, and providing summative outcome reports (e.g., increased participant and system capacity) to the Data Governance Manager, Data Governance Committee, and relevant stakeholders. The Evaluator will be employed for 20, 130.5, and 130.5 days (respectively, Years 1-3). The total cost estimate for this position is \$114,112.45 (\$87,745.06 + \$26,367.39 fringe).
- Two full-time **SLDS Secretaries** (2.0 FTE) will be hired and funded entirely by the SLDS grant but will vary their allocated time by deliverable.
 - The Secretary in the Office of Information Systems will provide support services to the Curriculum Development Specialists, Steering Committee, and other SLDS staff to maintain SLDS capacity building and training efforts. The Office of Information Systems Secretary will devote 20% of his or her time to this deliverable. This accounts for approximately 52.2 days per year, for a total cost of \$22,086.74 (\$16,983.27 salary + \$5,103.47 fringe).
 - The Secretary in the Office of Research will support the SLDS Evaluation Coordinator and the Curriculum Development Specialists. For this deliverable, the secretary will support the Evaluator during implementation monitoring. The Secretary in the Office of Research will devote 80% of his or her time to this deliverable. This accounts for approximately 208.8 days per year, for a total cost of 88,364.97 (\$67,933.08 salary + \$20,413.89 fringe).

Deliverable 3: Promote Access and Use of Data from SLDS	Year 1 2012-2013	Year 2 2013-2014	Year 3 2014-2015	TOTAL* \$4,095,787.63
Personnel	\$79,241.85	\$404,315.92	\$404,315.92	\$887,873.71
Data Governance Manager 40% of 1 FTE (104.4 days/yr)	\$32,599.94	\$32,599.94	\$32,599.94	\$97,799.83
SLDS Project Manager 33.3% of (b) FTE (43.5 days/yr)	\$12,091.26	\$12,091.26	\$12,091.26	\$36,273.78
SLDS Secretary (Office of Information Systems) 20% of 1 FTE (52.2 days per year)	\$5,661.09	\$5,661.09	\$5,661.09	\$16,983.27
SLDS Secretary (Office of Research) 80% of 1 FTE 208.8 days per year	\$22,644.36	\$22,644.36	\$22,644.36	\$67,933.08
SLDS Evaluation Coordinator 100% (.50 FTE) (20 days yr 1, 130.5 days yr. 2 and yr. 3)	\$6,245.20	\$40,749.93	\$40,749.93	\$87,745.06
SLDS-SIS Programmer 75% (1 FTE) (257.19/day yr 2 and yr 3)	\$0	\$50,344.94	\$50,344.94	\$100,689.89
SLDS Curriculum Specialist 100% of (1 FTE) (261 days/yr.)	\$0	\$60,056.10	\$60,056.10	\$120,112.20
SLDS Curriculum Specialist 100% of (1 FTE) (261 days/yr.)	\$0	\$60,056.10	\$60,056.10	\$120,112.20
SLDS Curriculum Specialist 100% of (1 FTE) (261 days/yr.)	\$0	\$60,056.10	\$60,056.10	\$120,112.20
SLDS Curriculum Specialist 100% of (1 FTE) (261 days/yr.)	\$0	\$60,056.10	\$60,056.10	\$120,112.20
Fringe (Calculated @ 30.05% salary)	\$23,812.18	\$121,496.93	\$121,496.93	\$266,806.05
Data Governance Manager 40% of 1 FTE	\$9,796.28	\$9,796.28	\$9,796.28	\$29,388.85
SLDS Project Manager 33.3% of (b) FTE	\$3,633.42	\$3,633.42	\$3,633.42	\$10,900.27
SLDS Secretary (Office of Information Systems) 20% of 1 FTE	\$1,701.16	\$1,701.16	\$1,701.16	\$5,103.47
SLDS Secretary (Office of Research) 80% of 1 FTE	\$6,804.63	\$6,804.63	\$6,804.63	\$20,413.89
SLDS Evaluation Coordinator 100% (.50 FTE)	\$1,876.68	\$12,245.35	\$12,245.35	\$26,367.39
SLDS-SIS Programmer 75% (1 FTE)	\$0	\$15,128.66	\$15,128.66	\$30,257.31
SLDS Curriculum Specialist 100% of (1 FTE)	\$0	\$18,046.86	\$18,046.86	\$36,093.72
SLDS Curriculum Specialist 100% of (1 FTE)	\$0	\$18,046.86	\$18,046.86	\$36,093.72
SLDS Curriculum Specialist 100% of (1 FTE)	\$0	\$18,046.86	\$18,046.86	\$36,093.72
SLDS Curriculum Specialist 100% of (1 FTE)	\$0	\$18,046.86	\$18,046.86	\$36,093.72
Total Personnel (Salary + Fringe)	\$103,054.03	\$525,812.87	\$525,812.87	\$1,154,679.76

*Note: Totals may not reflect exact sums due to fractions of cents and rounding.

Key Personnel (In-Kind Contributions)

The in-kind personnel costs associated with Deliverable 3 are estimated to be (b)(4)

- **SLDS Steering Committee.** A majority of the in-kind work will be associated with developing, disseminating, scoring, and awarding an RFP to develop a web-based tool set in support of the SLDS. It is expected that this will take 40 days of in-kind staff time across the SLDS Steering Committee members (not including the three grant-funded personnel who will commit 20 days each).
- **Internal Operations.** In addition to grant review, internal operations will provide 15 days of in-kind time to review and award the RFP for a total cost (b)(4)
- **Office of Research.** Coordinators from the Office of Research will be responsible for in-kind report review for initial implementation reports prior to the hiring of the SLDS Evaluation Coordinator. It is expected that the reviewer will devote 10 days of in-kind effort at an estimated (b)(4). In addition, during this period, the Office of Research will provide in-kind evaluation services for initial SLDS program implementation. The Office of Research evaluator will devote approximately 10 days of in-kind effort at an estimated (b)(4). The total estimated in-kind effort for this will be \$(b)(4). In-kind contributions from the Office of Research will cease upon the hiring of the SLDS Evaluation Coordinator.

Travel

Travel associated with Deliverable 3 is estimated to cost \$36,000:

- The SLDS Curriculum Development Specialists will deliver a comprehensive set of trainings to support data use, interpretation, and application to drive data-driven decision making. The total anticipated travel expenses for these trainings accounts for the four specialists conducting multiple trainings throughout the state and at the eight Regional Educational Services Agencies (RESAs). Travel for this in-service training will require five days per year for each of the eight RESAs. Travel costs are estimated at \$300 per day per person for in-state travel. Travel costs are estimated to take 80 days (total for all four specialists) in Year 1 (80 days x \$300/day = \$24,000) and 40 days (total for all four specialists) in Year 2 (40 days x \$300/day = \$12,000).

Equipment

Expected equipment costs are estimated at \$12,000.00:

- Grant funds will provide computer workstations and peripherals, such as printers, for the four SLDS Curriculum Development Specialists and one Evaluation Coordinator. The expense per staff person is based on the cost for a laptop and

presentation device for the four specialists and a laptop for the Evaluation Coordinator.

Supplies

The costs associated with Deliverable 3 are estimated to be \$3,250.00:

- This will include printing costs for the progress reports associated with the evaluation. Due to the recurring nature of reporting, costs will be \$250 per year for all three project years for a total of \$750.
- This will also include the cost of software for online surveying and statistical analysis software. This will cost \$1,500 in Year 1 and \$500 in both Years 2 and 3 for a total of \$2,500.

Contractual

The contractual costs associated with Deliverable 3 are estimated to be \$2,800,000.00:

- The contractual costs for Deliverable 3 support the comprehensive development of a tailored and customized set of web tools to be developed by a vendor, including all costs associated with software, hardware, and development (e.g., programming, training, etc.).
- West Virginia proposes to use a turnkey solution for the SLDS project, employing the services of an information technology vendor selected via a competitive RFP process to develop an SLDS solution. The vendor will provide the necessary hardware, software, and development services to deploy the solution.
- The anticipated hardware costs for the RFP will be for one web/application server (approximately \$30,000), one database server (approximately \$30,000), and one storage area network (SAN) server with 20 terabytes of storage (approximately \$150,000).
- The anticipated software costs will be for a Microsoft SQL Server Enterprise database license (approximately \$41,243 per processor [8] for a total of \$329,944) and IBM Cognos business intelligence software license (approximately \$450,000).
- The anticipated software development services will include construction of the actual data warehouse and development of the associated web-based access portal at an anticipated cost of \$1,137,500 (6,500 hours at \$175 per hour). This development will include the back-end infrastructure necessary to house the data and the development of methods for linking and transforming the data from the SIS into an appropriate format that lends itself to the selected analysis toolset, integration of an interactive data dictionary, as well as the user authentication models and front-end user interfaces.
- The anticipated cost of training, documentation, and online support tools provided by the selected vendor for WVDE staff and end users is \$672,556 (4,484 hours at \$150 per hour). This training will include high-end development and support training for WVDE staff and administrators on the platform as well as the analytics tools. In addition, the vendor will deploy a set of web trainings that have

been vetted with a pilot set of SLDS users and that will be archived online in an interactive format and made available to future users of the SLDS.

Indirect Costs

The indirect cost for Deliverable 3 is estimated to be \$89,857.87:

- WVDE’s indirect costs are calculated at 7.3% (federally negotiated rate) of the direct costs of the grant. The total direct costs associated with Deliverable 3 are estimated to be \$4,005,929.76 (\$2,800,000 of which are contractual services). As such, Deliverable 3 includes \$1,205,929.76 in non-contractual direct costs x 7.3% = \$88,032.87 in non-contractual indirect costs.
- Indirect costs can be applied only to the first \$25,000 of the expected contractual costs. As such, the indirect cost for contractual services is estimated to be \$1,825.00 for Deliverable 3, for a total of \$88,023.87 + \$1,825.00 = \$89,857.87

Deliverable 3: Promote Access and Use of Data from SLDS	Year 1 2012-2013	Year 2 2013-2014	Year 3 2014-2015	TOTAL*
Travel				\$36,000.00
(4) SLDS Curriculum Specialists Training 5 days at each of the 8 RESA Locations 80 days @ \$300/day (Yr. 1) 40 days @\$300/day (Yr. 2)	\$24,000.00	\$12,000.00	\$0	\$36,000.00
Equipment				\$12,000.00
Technology workstations (including computer, printer, presentation device) for (4) SLDS Curriculum Specialists and (1) Evaluation Coordinator	\$12,000.00	0	0	\$12,000.00
Supplies				\$3,250.00
Printing (for evaluation progress reports)	\$250.00	\$250.00	\$250.00	\$750.00
Software (online surveying and statistical analysis)	\$1,500.00	\$500.00	\$500.00	\$2,500.00
Contractual				\$2,800,000.00
Turnkey Solution for the SLDS project (Including all components of the RFP)				
Web/Application Server	\$0	\$30,000.00	\$0	\$30,000.00
Database server	\$0	\$30,000.00	\$0	\$30,000.00
Storage Area Network (SAN) Server	\$0	\$150,000.00	\$0	\$150,000.00
Microsoft SQL Server Enterprise database license	\$0	\$329,944.00	\$0	\$329,944.00
IBM Cognos Business Intelligence Software license	\$0	\$450,000.00	\$0	\$450,000.00
Anticipated Software Development Services (6,500 hours @ \$175/hour)	\$0	\$1,137,500.00	\$0	\$1,137,500.00
Training/Documentation/Online	\$0	\$672,556.00	\$0	\$672,556.00

Support Tools for WVDE staff and end users (4,484 hours @ \$150/hour)	
Indirect Costs 7.3% Direct Costs	\$89,857.87
Direct Costs (\$1,015,929.00)	\$88,032.87
Contractual Budget (7.3% of the first \$25,000 of the contractual amount \$2,800,000.00)	\$1,825.00

*Note: Totals may not reflect exact sums due to fractions of cents and rounding.

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

OMB Number: 1894-0008
Expiration Date: 02/28/2011

Name of Institution/Organization

West Virginia Department of Education

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

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

Budget Categories	Project Year 1 (a)	Project Year 2 (b)	Project Year 3 (c)	Project Year 4 (d)	Project Year 5 (e)	Total (f)
1. Personnel	180,629.74	522,485.46	522,485.46	0.00	0.00	1,225,600.66
2. Fringe Benefits	54,279.24	157,006.88	157,006.88	0.00	0.00	368,293.00
3. Travel	11,800.00	35,800.00	19,000.00	0.00	0.00	66,600.00
4. Equipment	15,500.00	2,000.00	0.00	0.00	0.00	17,500.00
5. Supplies	750.00	1,750.00	1,750.00	0.00	0.00	4,250.00
6. Contractual	47,500.00	2,895,000.00	47,500.00	0.00	0.00	2,990,000.00
7. Construction	0.00	0.00	0.00	0.00	0.00	0.00
8. Other	0.00	0.00	0.00	0.00	0.00	0.00
9. Total Direct Costs (lines 1-8)	310,458.98	3,614,042.34	747,742.34	0.00	0.00	4,672,243.66
10. Indirect Costs*	21,021.01	54,315.09	51,117.69	0.00	0.00	126,453.79
11. Training Stipends	0.00	0.00	0.00	0.00	0.00	0.00
12. Total Costs (lines 9-11)	331,479.99	3,668,357.43	798,860.03	0.00	0.00	4,798,697.45

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

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

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

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

Period Covered by the Indirect Cost Rate Agreement: From: 07/01/2007 To: 06/30/2012 (mm/dd/yyyy)

Approving Federal agency: ED Other (please specify):

The Indirect Cost Rate is 7.30 %.

(3) For Restricted Rate Programs (check one) -- Are you using a restricted indirect cost rate that:

Is included in your approved Indirect Cost Rate Agreement? or, Complies with 34 CFR 76.564(c)(2)? The Restricted Indirect Cost Rate is %.

Name of Institution/Organization West Virginia Department of Education	Applicants requesting funding for only one year should complete the column under "Project Year 1." Applicants requesting funding for multi-year grants should complete all applicable columns. Please read all instructions before completing form.	
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**SECTION B - BUDGET SUMMARY
NON-FEDERAL FUNDS**

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

SECTION C - BUDGET NARRATIVE (see instructions)