Deloitte.

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October 9, 2010

Ms. Connie Oswald
West Virginia Department of Education
Building 6
1900 Kanawha Boulevard, East
Charleston, WV 25305-0330

RE: Deloitte's Response to the West Virginia Department of Education Request for Proposal EDD398772 for the Design, Development, and Implementation of a Statewide Longitudinal Data System (P-12).

Dear Ms. Oswald:

Deloitte Consulting LLP (Deloitte), along with our teaming partner eScholar, is pleased to submit this Technical Proposal in response to the Request for Proposal (RFP) EDD398772 for a P-12 Longitudinal Data System. We have thoroughly reviewed your request and prepared a proposal that responds to your needs for a proven, high quality, low risk solution.

In carefully considering the requirements outlined in your RFP, we have assembled a qualified team with the right solution to meet your needs including your timeframe and objectives. Our team offers a proven track record of delivering successful longitudinal data systems for many other states.

In addition to our longitudinal data system experience, Deloitte has extensive experience with the State of West Virginia. For the past 16 years Deloitte has worked with the Department of Health and Human Resources (DHHR) and every West Virginia county government to develop and support RAPIDS, the state's integrated human services eligibility system. We believe our commitment to the State, as established by our strong and successful relationship with the DHHR, will help demonstrate the type of commitment, effort, and collaboration we bring to this important initiative.

Acknowledgement of signed addendum immediately follows this letter. In addition, Deloitte acknowledges the addition of a required Performance Bond in the amount of $250,000.

The State of West Virginia has been and continues to be a very important and valued client to Deloitte. We appreciate your consideration of Deloitte and our team for this important project. If you have any questions or would like additional information, please do not hesitate to contact me at (973) 602-5311 or email me at pbenowitz@deloitte.com.

Sincerely,

DELOITTE CONSULTING LLP

By: Philip S. Benowitz

Philip S. Benowitz, Director

State of West Virginia
Department of Administration
Purchasing Division
2019 Washington Street East
Post Office Box 50130
Charleston, WV 25305-0130

Solicitation

NUMBER	PAGE
EDD398772	1

ADDRESS CORRESPONDENCE TO ATTENTION OF:
CONNIE OSWALD
304-558-2157

VENDOR
RFQ COPY
TYPE NAME/ADDRESS HERE

Deloitte Consulting LLP
2500 One PPG Place
Pittsburgh, PA 15222

SHIP TO
DEPARTMENT OF EDUCATION

BUILDING 6
1900 KANAWHA BOULEVARD, EAST
CHARLESTON, WV
25305-0330

DATE PRINTED
09/25/2013

BID OPENING DATE: 10/09/2013 BID OPENING TIME 1:30PM

LINE	QUANTITY	UOP	CAT. NO.	ITEM NUMBER	UNIT PRICE	AMOUNT

ADDENDUM NO. 1

1. TO MOVE THE BID OPENING DATE FROM: 10/02/2013
   TO: 10/09/2013
   SAME LOCATION & TIME.
2. TO PROVIDE THE ADDENDUM ACKNOWLEDGMENT. THIS DOCUMENT SHOULD BE SIGNED & RETURNED WITH YOUR BID. FAILURE TO SIGN AND RETURN MAY RESULT IN DISQUALIFICATION OF YOUR BID.

END OF ADDENDUM NO. 1

SIGNATURE	TELEPHONE	DATE
Philip S. Bernardy	973-602-5311 / FAX: 908-803-0173	October 9, 2013
TITLE Director	**FEIN** 06-1454513	ADDRESS CHANGES TO BE NOTED ABOVE

WHEN RESPONDING TO SOLICITATION, INSERT NAME AND ADDRESS IN SPACE ABOVE LABELED 'VENDOR'

SOLICITATION NUMBER: EDD398772
Addendum Number: 01

The purpose of this addendum is to modify the solicitation identified as ("Solicitation") to reflect the change(s) identified and described below.

Applicable Addendum Category:

[✓] Modify bid opening date and time

[ ] Modify specifications of product or service being sought

[ ] Attachment of vendor questions and responses

[ ] Attachment of pre-bid sign-in sheet

[ ] Correction of error

[ ] Other

Description of Modification to Solicitation:

1. To move the bid opening date from 10/2/2013 to 10/9/2013. Same time & location.
2. To provide the addendum acknowledgment.

Additional Documentation: Documentation related to this Addendum (if any) has been included herewith as Attachment A and is specifically incorporated herein by reference.

Terms and Conditions:

1. All provisions of the Solicitation and other addenda not modified herein shall remain in full force and effect.

2. Vendor should acknowledge receipt of all addenda issued for this Solicitation by completing an Addendum Acknowledgment, a copy of which is included herewith. Failure to acknowledge addenda may result in bid disqualification. The addendum acknowledgement should be submitted with the bid to expedite document processing.

ATTACHMENT A

ADDENDUM ACKNOWLEDGEMENT FORM
SOLICITATION NO.: EDD398772

Instructions: Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge addenda may result in bid disqualification.

Acknowledgment: I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

Addendum Numbers Received:
(Check the box next to each addendum received)

[X]	Addendum No. 1	[ ]	Addendum No. 6
[ ]	Addendum No. 2	[ ]	Addendum No. 7
[ ]	Addendum No. 3	[ ]	Addendum No. 8
[ ]	Addendum No. 4	[ ]	Addendum No. 9
[ ]	Addendum No. 5	[ ]	Addendum No. 10

I understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information issued in writing and added to the specifications by an official addendum is binding.

Deloitte Consulting LLP
Company

Philip S. Bennett
Authorized Signature

October 9, 2013
Date

NOTE: This addendum acknowledgement should be submitted with the bid to expedite document processing.
Revised 6/8/2012

State of West Virginia
Department of Administration
Purchasing Division
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Charleston, WV 25305-0130

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1900 KANAWHA BOULEVARD, EAST
CHARLESTON, WV
25305-0330

DATE PRINTED
09/30/2013

BID OPENING DATE: 10/09/2013 BID OPENING TIME 1:30PM

LINE	QUANTITY	UOP	CAT. NO.	ITEM NUMBER	UNIT PRICE	AMOUNT

ADDENDUM NO. 2

1. TO PROVIDE ANSWERS TO QUESTIONS RECEIVED.
2. TO PROVIDE REVISED TERMS & CONDITIONS TO INCLUDE A PERFORMANCE BOND OF $250,000.00
3. TO PROVIDE AN UPDATED ATTACHMENT C: COST SHEET.
4. TO PROVIDE THE NON-MANDATORY PRE-BID SIGN IN SHEETS
5. TO PROVIDE THE ADDENDUM ACKNOWLEDGMENT. THIS DOCUMENT SHOULD BE SIGNED & RETURNED WITH YOUR BID. FAILURE TO SIGN AND RETURN MAY RESULT IN DISQUALIFICATION OF YOUR BID.

END OF ADDENDUM NO. 2

SIGNATURE	TELEPHONE	DATE
Philip S. Bernardy	973-602-5311 / FAX: 908-803-0173	October 9, 2013
TITLE	**FEIN**	**ADDRESS CHANGES TO BE NOTED ABOVE**
Director	06-1454513	

WHEN RESPONDING TO SOLICITATION, INSERT NAME AND ADDRESS IN SPACE ABOVE LABELED 'VENDOR'

SOLICITATION NUMBER: EDD398772
Addendum Number: 02

The purpose of this addendum is to modify the solicitation identified as ("Solicitation") to reflect the change(s) identified and described below.

Applicable Addendum Category:

[ ] Modify bid opening date and time

[✓] Modify specifications of product or service being sought

[✓] Attachment of vendor questions and responses

[✓] Attachment of pre-bid sign-in sheet

[ ] Correction of error

[✓] Other

Description of Modification to Solicitation:

1. To provide the answers to questions received for this solicitation.
2. To provide revised terms & conditions to include a Performance Bond of $250,000.00
3. To provide an updated Attachment C: Cost Sheet
4. To provide the Non-Mandatory Pre-Bid Meeting sign-in sheets.
5. To provide the addendum acknowledgment.

Additional Documentation: Documentation related to this Addendum (if any) has been included herewith as Attachment A and is specifically incorporated herein by reference.

Terms and Conditions:

1. All provisions of the Solicitation and other addenda not modified herein shall remain in full force and effect.

2. Vendor should acknowledge receipt of all addenda issued for this Solicitation by completing an Addendum Acknowledgment, a copy of which is included herewith. Failure to acknowledge addenda may result in bid disqualification. The addendum acknowledgement should be submitted with the bid to expedite document processing.

ATTACHMENT A

Responses to Vendor Questions
RFP #EDD398772

1. In the RFP, WVDE uses the terms Statewide Longitudinal Data System (SLDS) and Data Warehouse and Reporting System (DWRS). Are these terms synonymous or is there a distinction between the two that vendors should be aware of?

   It is the intention of the RFP that SLDS and DWRS be considered to be synonymous when either reference is used in the RFP.

2. The RFP indicates that the solution shall not be proprietary and furthermore that the vendor-developed DWRS and all deliverables will be owned and operated by the WVDE upon project completion. It is likely that any vendor solution will include software components that will have to be licensed from the manufacturer; examples include: a business intelligence/reporting tool, a commercial-off-the-shelf (COTS) education data warehouse, and/or other software development tools. Can WVDE confirm that licensed software can be utilized as part of the proposed solution?

   Yes, licensable software may be included in the RFP. However, it is the intent of the WVDE that such costs not be significant to the overall cost of the project. Whenever possible by the vendor, perpetual licensing should be quoted in the proposal. (Factor all licensing costs on the cost sheet).

3. Page 11 of the RFP includes a section on liquidated damages that is not completed. Please confirm that there are no liquidated damages?

   The liquidated damages section was inadvertently left incomplete in the current version of the RFP, in lieu of liquidated damages, we are requiring a $250,000 Performance Bond.

4. Does WVDE have a preliminary data dictionary of the data elements it desires to load into the SLDS that can be provided? If not, what data categories or "domains" does WVDE expect to load in the SLDS during the contract period? Data domains often loaded in an SLDS include: Districti/School Details, Student Demographics, Student Enrollment, Program Eligibility, Program Participation, Attendance (summary, daily, and/or class period), Discipline, Special Education Details, Career and Technical Education Details, Course Enrollments (including grades), Assessment Results, Staff Demographics, Staff Assignments, Staff Certifications, Staff Professional Development, Staff Attendance (summary and/or daily), General Ledger, Postsecondary Enrollment (available through the National Student Clearinghouse), etc.

   The WVDE data dictionary is currently being developed and round 1 is in draft form. It will likely include many of the categories listed as examples in the question. We will not however, work with Postsecondary Enrollment as that is part of the P20 system, not the PK-12 system for which this RFP pertains.

5. If WVDE expects to load assessment data into the SLDS, please provide a list of these assessments. Please include a description of each assessment, a description and the approximate number of students that take the assessment each year, and the level of detail to which the data are expected

to be loaded in the SLDS (e.g., test-level results, subtest-level results, concept-level results, or question (item-level results).

It is anticipated that the successful solution will have the capability of loading assessment data in the SLDS. Assessments that should be part of the SLDS will include those administered by the State (e.g. WESTEST2, WorkKeys). Ideally, reporting and analysis would include the leveled results described in the example with appropriate security and privacy considerations in place – aggregate displays with appropriate cell suppression for public reporting, for example.

Assessment	Description	Number of Students (all numbers are approximations)
2. WESTEST 2 (including online writing assessment)	An annual summative assessment required to report proficiency rates for NCLB. WESTEST 2 is administered to students in grades 3-11 and includes an online writing assessment.	182,000 (approximately 20,000 students per grade in grades 3-11)
3. WESTELL	An assessment administered to students in grades K-12 who are not native English speakers or who have a home language other than English.	>5000
4. APTA	Annual summative alternate assessment required to report proficiency rates for NCLB. APTA is administered to students in grades 3-8 and 11.	>5000
5. HEAP	Online standardized assessment targeting students in grades 6 and 8 and high school required by Policy 2520.5.	40,000
6. Fitness-Gram	A fitness test required in Grades 4 and 8 and high school by policy 2520.6.	40,000
7. Global 21 CTE	Students in grades 9-12 who complete a career concentration.	6,000
8. ACT EXPLORE	EXPLORE is part of the West Virginia Measures of Academic Progress and is administered to students in grade	20,000
9. ACT PLAN	PLAN is part of the West Virginia Measures of Academic Progress and is administered to students in grade 10	20,000
10. ACT Work Keys	Grade 12 students who are taking career/technical education courses and are working toward receiving the WV Work Readiness credential.	>5000
14. ACT	ACT is not part of the West Virginia Measure of Academic Progress and covers the content areas of English, mathematics, reading and science. The writing test is optional. ACT is administered to students interested in attending college.	>5000
15. PSAT	PSAT is not part of the West Virginia Measure of Academic Progress and is administered to students in grades 10 and 11.	>5000
16. SAT	SAT is not part of the West Virginia Measure of Academic Progress and is administered to students interested in attending college	>5000
17. AP Exams	Students enrolled in AP courses	>5000
18. Golden Horseshoe	All grade 8 students are eligible to take the Golden Horseshoe exam.	20,000

6. Besides WVEIS, what other data sources does WVDE expect for the SLDS? Other potential sources could include: state-level data sources with district/school data, state-level data source with teacher certification/licensing data, state-level data source(s) with assessment results. Additionally, will any data be sourced directly from the LEAs or will all LEA-level data flow through WVEIS?

The majority of data sources will come through WVEIS. There are some collections by office that occur outside of WVEIS that we may wish to include as part of the SLDS, but those are not known at this time.

7. Does WVDE expect to conduct EDFacts reporting out of the SLDS?

   Yes, WVDE expects to conduct EDFacts reporting in conjunction with the SLDS solution.

8. Does WVDE expect to calculate Adequate Yearly Progress (AYP) and report on this out of the SLDS? If so, can WVDE provide the AYP calculation specifications?

   By virtue of the WVDE having been granted a waiver, the state is no longer subject to the AYP requirements of Federal No Child Left Behind legislation. However, we do expect that report card and accountability results would be part of the SLDS as part of the required ESEA Reporting. The calculations will likely occur on the WVDE side as they do currently, and the results would then be fed to the SLDS. The Vendor's solution, however, should address how the Vendor could support the Agency to either display or calculate WV Accountability System designations. A description of how ESEA Designations are calculated is included in the WV ESEA Flexibility Request that was submitted to the U.S. Department of Education. It can be found at http://wvde.state.wv.us/esea/esea_full_waiver_request.pdf

9. Does WVDE expect to calculate Highly Qualified Teacher (HQT) and report on this out of the SLDS? If so, can WVDE provide the HQT calculation specifications?

   Yes, while the WVDE will continue to complete the actual calculations within the existing data systems, reporting of these data will be required within the SLDS. At this point the calculation specifications would not be required for initial vendor implementation.

10. How many reports does WVDE anticipate will be necessary to meet the reporting related requirements of the RFP?

    The number of reports has not yet been determined. Furthermore, any quantity determined at the outset of the project will likely change over the life of the project.

11. Does WVDE have a business intelligence tool that it prefers to use for the SLDS? If so, are there existing licenses that can be utilized or will the vendor need to include the licenses in its proposal?

    Currently the WVDE has not adopted any preferred business intelligence tool. Vendor business intelligence tools and necessary licenses should be included in the response to the RFP.

12. How many users by user type or role does WVDE expect for the SLDS?

    The WVDE has not determined the required users, types or roles at this time. The Data Governance Committee at the WVDE is currently working to compile this information. The Vendor should be expected to work with the Data Governance Committee to finalize roles and access. Currently, the expected roles and number of users is expected to be the following:

    - *WVDE programmers – approximately 15*

- *WVDE staff – approximately 100*
- *RESA staff – approximately 40*
- *LEA Administrators – 55 districts*
- *Principals – approximately 700*
- *Educators – approximately 20,000*
- *General (Public, other entities with aggregate level access) – approximately 500,000*

These estimates are subject to change during the life of the project.

13. What is the peak concurrent usage that the system should be designed for?

    The system should be designed to allow 15 concurrent programmers. As for users of other types, it is anticipated the successful bidder will account for scaling during the life of the project. This should include anticipated load for high traffic use during certain times of the year, such as ESEA accountability release, which would include state-wide access by Local Educational Agency staff, principals, educators, and the public.

14. Does WVDE have a preference for the SLDS database management system (DBMS)? Will the vendor need to include the DBMS licenses in its proposal?

    The WVDE has not specified a required DBMS as part of this RFP. For vendor reference, the WVDE is currently operating IBM DB2/400 and Microsoft SQLServer databases in place. Yes, the vendor will need to account for the proper licensing requirements, specifications and costs in their proposal.

15. Does WVDE have a budget for the services to be procured through this RFP that can be shared? If so, please specify what the budget provided includes/excludes.

    The budgetary information has not yet been finalized and as such will not be released.

16. Page 23 of the RFP includes that the DWRS should be interoperable with external systems. Can WVDE provide a list of these external systems?
    Two currently identified external systems would include WVEIS and P20. Other external systems include might include WVDE SQLServer based systems and vendor assessment systems.

17. Will the vendor be responsible for the extraction of data from the SLDS for loading into the P-20W SLDS?

    It is anticipated that the data extractions will be auto fed by the vendor's solution to the P20 system. The successful bidder must possess the capacity to build ETL processes to feed P20.

18. Does WVDE have an existing identity and access management system within which the SLDS users will be provisioned and that will provide authentication and authorization services to the SLDS components? Or is the vendor expected to include this in their proposed solution? If a system already exists can WVDE provide general information on this system?

    The WVDE does not currently have an across the board solution to fulfill these items. The successful bidder should include their plan within their proposal.

19. Are there any requirements for the SLDS user interface components to be integrated with an existing WVDE portal?

    Integration with the WVDE website landing page for the SLDS will be important, so that users can go to the WVDE site to get to the SLDS interface.

20. Section 4.3.5 of the RFP indicates that references should be provided. Please confirm that these are vendor references and not individual references for the proposed key project staff.

    The intent of this specification is to require references from customers who have implemented projects similar in scope as related to this RFP specification. It is not the intent of the WVDE for the vendor to provide references for the project staff.

21. Would WVDE accept a support model that distributes the workload between WVDE and the vendor? In such a model WVDE staff could provide first-line support to address support needs such as resolution of user ID/password issues, verification of proper software setup, assistance with system navigation, etc. The vendor can address more specialized support needs that are escalated by WVDE staff. This includes the troubleshooting of potential software defects and the resolution of confirmed software defects.

    It is certainly the preference of the WVDE that the support model includes distribution of the workload between the WVDE and the vendor. Although initially, the model may rely more heavily on the vendor, by the end of the project, the WVDE should have developed the capacity to provide virtually all of the support.

22. Page 24 of the RFP mentions an SLDS sustainability roadmap. Can WVDE provide additional detail on this? Is the vendor responsible for producing this document?

    It is the intent of the WVDE that included within the RFP is a plan addressing ideas proposed by the successful bidder which would build capacity or opportunity at the WVDE to generate a sustainability plan for staff at the WVDE.

23. Providing information to the public through the SLDS is mentioned in a few places within the RFP. Can WVDE provide additional details regarding the expected reporting functionality to be provided to the public?

    It is anticipated the future plans for the SLDS project will include the capability of the public to have some ability to select parameters which would allow for customizable reporting at the aggregate level.

24. Student and parents are listed in the RFP as stakeholders that may have access to SLDS reports. Does WVDE expect that students and parents will have access to secured interactive reporting functionality within the SLDS? If so, can WVDE provide additional details regarding the expected reporting functionality for these stakeholders?

Functionality for student and parent SLDS reports should minimally be expected to mirror that of public access. The Vendor should propose creative solutions that address enhanced reporting functionality for these stakeholders.

25. Attachment C, the Cost Sheet, includes an "Installation of hardware" deliverable. If the vendor is not planning on including the hardware and associated pricing as part of its proposal, should the price for this deliverable be entered as zero?

    Yes, if the vendor proposes equipment within their proposal but does not list a cost, it will be assumed that the vendor will provide equipment at no cost to the WVDE.

26. Can WVDE confirm that the solution will be hosted by the State and furthermore that the State will be responsible for installation and configuration of the hardware and other infrastructure components?

    With the assistance of the vendor, when applicable, it is the intent of the WVDE to perform the infrastructure related tasks of this project including hosting, installation, and configuration.

27. Attachment C, the Cost Sheet, includes a deliverable "Tools for the analysis and interpretation of data in reports" that appears to be separate and distinct from the tool for standard and customizable reports. Can WVDE provide more detail on the expected functionality of these tools?

    Yes, these two areas are considered distinct from one another. We would like to see the capability for users to generate reports that contain data and graphics, for example. The analysis component would take the reporting one level further by providing some interpretation and guidance as to the meaning of the report that was generated.

28. Regarding the WVDEs custom reporting needs, there will most likely be a need for licensing. Will licensing of components like custom reporting be acceptable to the WVDE?

    Yes, but also see the related response to question #2.

29. In light of the WVDEs vision of allowing public access and data manipulation, can the stakeholders' populations be clearly defined?

    Based upon the information known now, the current stakeholders include: Educators, Parents, Legislature, WV Board of Education members, WVDE Staff, County level education staff, research community, business community, potential for general public. Furthermore, regarding the manner of access to the SLDS project, current access should be browser based, with potential future compatibility with handheld units such as smartphones.

30. In regards to business intelligence and reporting, and drill down capabilities of the data, where does predictive analytics fall in the vision of the project?

    Predictive analytics are one component of analytics overall and would be desirable, but at this stage, predictive analytics would be functionality to be operational in the future. The successful bidder will describe their capability and vision in the section of their response related to analytics.

31. Upon review of the Federal grant award, it appeared to include at least one proprietary tool (Cognos). Has the WVDE established any standards for tool sets?

    The mention of this tool was marked as an example of a tool available in the grant application. Consistent with the response to question 11, the WVDE has not established any standard tools.

32. Can the WVDE address any adopted interfaces or established external reporting formats?

    Interfaces and external reporting formats will range from structured (such as EDFacts) to unstructured. The proposed solution should be capable of supporting the Common Education Data Standards (CEDS).

33. Can the WVDE describe its vision for the management of metadata?

    Currently, the WVDE cannot provide useful metadata when responding to requests from various constituents. It is the vision of the WVDE to provide future data along with relevant metadata with reports to allow for a more useful interpretation of the data and how it relates to the questions posed by the constituency, as well as providing a comprehensive data dictionary resource.

34. Regarding requirements 4.5.2: Does this include IP for the DWRS source code?

    No. The Agency would consider a proposal where the vendor retains ownership of its intellectual property and provides the Agency with a perpetual, royalty-free license to that pre-existing technology.

35. The high-level summary of the RPF lists Educations, Policy Makers, and Researchers as the users for the SLDS. However, there are references made to all user levels (Attachment C) that list public users. Will there be public access to the DWRS beyond anonymous access? If so, would there be Parent and Student accounts to access the DWRS?

    Anonymous access is all that is expected for general public as the reporting for the public will be at the aggregate level with cell suppression rules in place. Parent and Student accounts may be a consideration for the future.

36. Attachment C: Cost Sheet (pg 41) references "Tools for the analysis and interpretation of data in reports". Does this relate to OLAP or Statistical Reporting tools or is the more from Professional Development/Training?

    The cost sheet item refers to OLAP or Statistical Reporting tools to help users select the appropriate tools and understand the data being displayed.

37. Will the WVEIS SIS be the primary data source system? If there are others, approximately how many are there and what are they?

    While WVEIS data warehouse will the primary source of data, additional data will be used. These sources are primarily DB2/400 tables, Microsoft SQL Server tables, or vendor supplied flat files. The successful vendor should describe their full capability of ETL processes.

38. Is there a stated requirement on the frequency of data ingestion (ETL) from WVEIS to the DWRS? Are there any SLAs on the availability of data after ingestion? Is Data Archival a requirement of the DWRS?

Frequency of ETL process will vary with most initially occurring on a monthly, quarterly, or annual basis. Upon completion, ETL could occur as frequently as daily. Data availability after ingestion is yet to be determined. Data archival is not specifically required in this RFP. However, the successful vendor should describe the model used if available within their products.

39. Will the data in the DWRS be exported to the States P-20W system (Pg 22)?

Some elements in the DWRS will be exported to the P20 system.

40. On Pg. 23, it is stated that "DWRS should be interoperable with external systems to facilitate appropriate and secure data exchanges." Does this imply both data import and export? If export is required, what examples of external downstream systems?

Yes, this both implies import and export. With regard to export, as noted in previous question responses, data from the DWRS will be used within the state's P20 system. The DWRS should also be capable of exporting flat files from multiple mapped files for required reporting (e.g., EDFacts). Additionally, the ability to interact with analytics packages in the future may be of interest.

41. Can WVDE articulate the complete list of data sources from which they expect the data to be sourced for the SLDS? Can you provide some general information about format of this data, quantity, accessibility, etc.?

See response to question number 37.

42. Are there existing database management systems (i.e. Oracle) licenses that a vendor can take advantage of in implementing the SLDS? Reporting tool licenses? ETL tool licenses?

No.

43. Would WVDE consider a traditional software as a service (SaaS) implementation of the SLDS?

The WVDEs intent is to host and maintain the SLDS.

44. On the top of page 30, the fourth bullet references "validated data ... within and outside the WVDE's transactional systems". Can WVDE elaborate on the meaning of validated data? Can WVDE provide examples of this data?

Data loaded into the DWRS will be from certified collections.

45. On the top of page 30, there is a reference to "on-the-fly reporting". What is the definition of on-the-fly reporting?

On-the-fly reporting is defined as flexibly creating charts, graphs, or other data visualizations in real-time using data that are accessible to the user through the SLDS, or ZoomWV. This can include, for example, dragging and dropping data fields onto a chart or selecting data elements from a list to create graphical representations of data.

46. Can WVDE please elaborate on the statement that appears in a number of places that "[t]he solution shall not be proprietary?" There are many current, pre-existing, proprietary solutions and software that could be part of this SLDS solution. Does this statement disqualify solutions that include these proprietary solutions? Does this mean that each individual component of the DWRS must not be proprietary? What is the definition of non-proprietary? (E.g. open-source)

    The WVDE wishes to assure that the products provided by the vendor allow for the WVDE to continue to maintain the DWRS in the absence of the vendor. While the vendor's solution may include industry standard and commercially licensed software components, these components should not prohibit the WVDE from engaging additional vendors for support and relevant development in the future. Furthermore, any 'prepackaged' reporting solutions related to K-12 educational data should not prohibit the WVDE from modifying the reports or visualizations to meet the needs of the state.

47. Does WVDE expect to load any medical related data to the SLDS that would be subject to HIPPA security and privacy regulations?

    No.

48. What is the size of the current database?

    There is not a current comparable database.

49. On what platform does this data reside?

    See response to question number 37

50. Can you describe the number of users and the types of data consumption behavior (number of users and typical tasks - casual versus ad hoc users)

    Please the users described in Question #12. Although we're not entirely sure, we would expect that each of these groups would have some needs where they'd like to run their own reports through selecting parameters to display, as well as accessing reports that we've determined need to be available based on the critical policy questions driven by the Data Governance Committees.

51. Is a cloud solution permissible?

    Yes.

52. Will the RFP require that all hardware be included in the response?

    WVDE reserves the right to procure any needed hardware for this solicitation on our own.

Hardware is listed on the Optional Pricing Section and will not be evaluated or made part of the total bid, however if the vendor's bid solutions requires hardware for implementation, the vendor should bid those items on Attachment C.

Hardware listed on Attachment C with no cost, shall be evaluated and billed at no cost.

Note of Clarification:

Attachment C: Cost Sheet *– Is reflective of the specifications contained in Section Two and contains all pricing required to implement and/or complete solution.*

Attachment D: Optional Cost Sheet *– Intended for bidder to organize and offer optional costs beyond the base specifications of this RFP. Optional items are not included in the total bid cost.*

53. Or is the hardware component only for informational purposes and a new RFQ will be issued for the hardware?

It is not the current intent of the WVDE to issue a separate RFQ for hardware; however WVDE reserves the right to procure any needed hardware for this solution on our own.

Vendor's choosing to list hardware on Attachment D, that will be used for a informational purpose, unless it's determined a need for a listed item.

Any hardware required as part of the Vendor's solution should be included in the response on Attachment C.

54. Is there a preference on database platforms such as SQL vs Oracle?

No.

55. Is there a preference on ETL technology?

No.

56. Is there a preference on reporting tools?

No.

57. Is the vendor on our own for the project or are we using internal resource in any capacity?

It is expected that WVDE staff would partner closely with the vendor throughout all stages of the project.

58. Would the state consider a perpetual software license agreement that allows the state of West Virginia to use the software in perpetuity but does not allow the state to resell or redistribute the software to other states or organizations?

    Yes.

59. Section 12, Liquidated Damages, of the General Terms and Conditions, appears to have missing information. Under what condition(s) would liquidated damages apply and what would be the amount of liquidated damages?

    See #3

60. SAS is a proprietary software company that provides commercial off the shelf proprietary products and related services and we believe that we can address your needs. Sections 4.5.2 and 4.5.3 seem to indicate that the State wants SAS to transfer ownership of its intellectual property; is this correct?

    No. The Agency would consider a perpetual license to continue operating the Vendor's solution.

61. Would it be permitted to submit a not-to-exceed (time and materials) bid for the project work other than fixed pricing for the software and install/validation? We can accommodate a fixed price for the software and the install/validation components of the RFP. As we currently have limited specific project information regarding the scope of other consulting work, however, the not-to-exceed approach would enable presenting a better estimate of the actual cost.

    NO

62. 4.4.1.1.c – the proposed database infrastructure to be utilized for the DWRS. Does WVDE have a preferred database either existing or that would be acquired as part of the project?

    No, it does not have a preferred database.

63. 4.4.1.4 – Allow for role-specific access across all levels of the DWRS by providing...Is the question specific to role-based access to system functionality and data within the proposed DWRS or is it intended to extended to the source data systems?

    The question is related to role-based access to system functionality and the data within the system—that depending on the role, the access to information (drillability) changes.

64. 4.4.3.1.c - ...a reporting tool that can support the target number of concurrent users and total users...Is an estimate of the target number of concurrent users and total users available?

    Please see responses to questions 12 and 13.

65. 4.4.3.1.g - ...signature sign-off procedures...Does this refer to workflow; e.g., review/approve content before it is published?

    Yes, this refers to the review and approval process before work is published and/or finalized.

66. 4.4.3.1.h – Specify whether the proposed reporting tool includes a thick client as well as a thin client...Is mobile information delivery required?

    It is not required.

67. What are your existing pain points? Who currently needs data/info and is not getting it or not getting in the right form?

    Existing areas of difficulty associated with the current data warehouse include real-time access to program-relevant data for all areas of the WVDE. The Vendor's proposed solution should address data availability while adhering to all data security and privacy requirements set forth in the RFP.

68. *What are key questions you want to answer that you cannot currently?*

    Key questions beyond state and federal reporting requirements have not yet been determined as part of the Data Governance structure.

69. *Does the proposed solution need to build on top of an existing data warehouse/ infrastructure or is this basically a 'greenfield' project?*

    It will build from data that are currently in the West Virginia Education Information System and other WVDE data sources.

70. *What requirements exist to connect to the P-20W system?*

    Currently, these data are pulled by hand and sent securely; therefore we need to be able to automatically feed the required data to the P20 system automatically.

71. *Is there a plan to pull/ connect this system to financial data?*

    No. The system does not need to address this.

72. *How mature is the Data Governance Committee and associated processes? Beyond defining role access, what part will they play in this project?*

    The Data Governance Committee first met in April 2013. This group has influence over the mission, the major audiences, vetting for the look and feel, and determining some of the major needs of users. The Data Policy Committee, another important component of the data governance structure at WVDE, will have similar influence as well.

73. *How many people will be creating dashboards and reports?*

    The system should allow for 15 programmers and for members of the Data Governance Committee and associated Data Steward Task Teams to provide direction and guidance to developing dashboards and reports.

74. *How many users will be accessing these reports? If this is unknown or very large, approximately how many people might be choosing to click on a report link at any given moment?*

    Please see the responses to Questions 12 and 13.

75. *How many business analysts might want to build their own views and reports and queries from scratch?*

    The proposed solution should account for users at any level to build reports or queries based on their role-available data.

76. *Does WV have an online learning platform for the RESAS and the LEAs?*

    Yes.

77. *Will WV be able to provide access to a group of qualified trainers for the suggested train-the-trainer method?*

    Yes.

78. *Would the WVDE be interested in having access to a support desk to address technical questions and receive software upd*ates for a fixed annual fee after the transition has taken place?

    The Agency is not opposed to this proposal, but it is subject to any purchasing requirements, which may include rebidding, to acquire such services.

79. Would the WVDE be interested in receiving enhancements to the application for a fixed annual fee to keep the application in line with evolving demands of SLDS such as evolving data standards and evolving technology standards?

    See # 78

80. Many state education agencies take advantage of commercial off the shelf (COTS) solutions to address their SLDS data warehouse and reporting solutions needs to avoid the risk, expense and labor involved in maintaining and enhancing custom built solutions and to get the benefit of leading edge functionality developed to meet the diverse needs of many agencies. The benefits include: adherence to data standards, support for rapidly evolving requirements including evolving federal reporting requirements in addition to capabilities added at the request of other state education agencies that all state education agencies would benefit from. Would the Agency consider a COTS solution if it met the needs of the Agency as long as the solution was provided to the Agency under a perpetual, royalty-free license?

    Yes.

81. Virtually all providers of data warehouse and reporting solutions, even those that deliver only custom "work for hire" solutions that don't include ongoing support, whether they are for profit or not-for-profit entities, implement "pre-existing" technologies as part of their solutions. The standard practice is to license that pre-existing technology to the state education agency. The

state education agency would own any original work produced by the vendor under the contract. Would the Agency consider a proposal where the vendor retains ownership of its pre-existing technology and provides the Agency with a perpetual, royalty-free license to that pre-existing technology?

Yes.

GENERAL TERMS AND CONDITIONS:

1. **CONTRACTUAL AGREEMENT:** Issuance of a Purchase Order signed by the Purchasing Division Director, or his designee, and approved as to form by the Attorney General's office constitutes acceptance of this Contract made by and between the State of West Virginia and the Vendor. Vendor's signature on its bid signifies Vendor's agreement to be bound by and accept the terms and conditions contained in this Contract.

2. **DEFINITIONS:** As used in this Solicitation / Contract, the following terms shall have the meanings attributed to them below. Additional definitions may be found in the specifications included with this Solicitation / Contract.

   2.1 "Agency" or **"Agencies"** means the agency, board, commission, or other entity of the State of West Virginia that is identified on the first page of the Solicitation or any other public entity seeking to procure goods or services under this Contract.

   2.2 "Contract" means the binding agreement that is entered into between the State and the Vendor to provide the goods and services requested in the Solicitation.

   2.3 "Director" means the Director of the West Virginia Department of Administration, Purchasing Division.

   2.4 "Purchasing Division" means the West Virginia Department of Administration, Purchasing Division.

   2.5 "Purchase Order" means the document signed by the Agency and the Purchasing Division, and approved as to form by the Attorney General, that identifies the Vendor as the successful bidder and Contract holder.

   2.6 "Solicitation" means the official solicitation published by the Purchasing Division and identified by number on the first page thereof.

   2.7 "State" means the State of West Virginia and/or any of its agencies, commissions, boards, etc. as context requires.

   2.8 "Vendor" or **"Vendors"** means any entity submitting a bid in response to the Solicitation, the entity that has been selected as the lowest responsible bidder, or the entity that has been awarded the Contract as context requires.

3. **CONTRACT TERM; RENEWAL; EXTENSION:** The term of this Contract shall be determined in accordance with the category that has been identified as applicable to this Contract below:

☑ **Term Contract**

Initial Contract Term: This Contract becomes effective on Upon Award and extends for a period of One (1) year(s).

Renewal Term: This Contract may be renewed upon the mutual written consent of the Agency, and the Vendor, with approval of the Purchasing Division and the Attorney General's office (Attorney General approval is as to form only). Any request for renewal must be submitted to the Purchasing Division Director thirty (30) days prior to the expiration date of the initial contract term or appropriate renewal term. A Contract renewal shall be in accordance with the terms and conditions of the original contract. Renewal of this Contract is limited to Two (2) successive one (1) year periods. Automatic renewal of this Contract is prohibited. Notwithstanding the foregoing, Purchasing Division approval is not required on agency delegated or exempt purchases. Attorney General approval may be required for vendor terms and conditions.

Reasonable Time Extension: At the sole discretion of the Purchasing Division Director, and with approval from the Attorney General's office (Attorney General approval is as to form only), this Contract may be extended for a reasonable time after the initial Contract term or after any renewal term as may be necessary to obtain a new contract or renew this Contract. Any reasonable time extension shall not exceed twelve (12) months. Vendor may avoid a reasonable time extension by providing the Purchasing Division Director with written notice of Vendor's desire to terminate this Contract 30 days prior to the expiration of the then current term. During any reasonable time extension period, the Vendor may terminate this Contract for any reason upon giving the Purchasing Division Director 30 days written notice. Automatic extension of this Contract is prohibited. Notwithstanding the foregoing, Purchasing Division approval is not required on agency delegated or exempt purchases, but Attorney General approval may be required.

Release Order Limitations: In the event that this contract permits release orders, a release order may only be issued during the time this Contract is in effect. Any release order issued within one year of the expiration of this Contract shall be effective for one year from the date the release order is issued. No release order may be extended beyond one year after this Contract has expired.

☐ **Fixed Period Contract:** This Contract becomes effective upon Vendor's receipt of the notice to proceed and must be completed within days.

☐ **One Time Purchase:** The term of this Contract shall run from the issuance of the Purchase Order until all of the goods contracted for have been delivered, but in no event shall this Contract extend for more than one fiscal year.

☐ **Other:** See attached.

4. **NOTICE TO PROCEED:** Vendor shall begin performance of this Contract immediately upon receiving notice to proceed unless otherwise instructed by the Agency. Unless otherwise specified, the fully executed Purchase Order will be considered notice to proceed

5. **QUANTITIES:** The quantities required under this Contract shall be determined in accordance with the category that has been identified as applicable to this Contract below.

☑ **Open End Contract:** Quantities listed in this Solicitation are approximations only, based on estimates supplied by the Agency. It is understood and agreed that the Contract shall cover the quantities actually ordered for delivery during the term of the Contract, whether more or less than the quantities shown.

☐ **Service:** The scope of the service to be provided will be more clearly defined in the specifications included herewith.

☑ **Combined Service and Goods:** The scope of the service and deliverable goods to be provided will be more clearly defined in the specifications included herewith.

☐ **One Time Purchase:** This Contract is for the purchase of a set quantity of goods that are identified in the specifications included herewith. Once those items have been delivered, no additional goods may be procured under this Contract without an appropriate change order approved by the Vendor, Agency, Purchasing Division, and Attorney General's office.

6. **PRICING:** The pricing set forth herein is firm for the life of the Contract, unless specified elsewhere within this Solicitation/Contract by the State. A Vendor's inclusion of price adjustment provisions in its bid, without an express authorization from the State in the Solicitation to do so, may result in bid disqualification.

7. **EMERGENCY PURCHASES:** The Purchasing Division Director may authorize the Agency to purchase goods or services in the open market that Vendor would otherwise provide under this Contract if those goods or services are for immediate or expedited delivery in an emergency. Emergencies shall include, but are not limited to, delays in transportation or an unanticipated increase in the volume of work. An emergency purchase in the open market, approved by the Purchasing Division Director, shall not constitute of breach of this Contract and shall not entitle the Vendor to any form of compensation or damages. This provision does not excuse the State from fulfilling its obligations under a One Time Purchase contract.

8. **REQUIRED DOCUMENTS:** All of the items checked below must be provided to the Purchasing Division by the Vendor as specified below.

☐ **BID BOND:** All Vendors shall furnish a bid bond in the amount of five percent (5%) of the total amount of the bid protecting the State of West Virginia. The bid bond must be submitted with the bid.

☑ **PERFORMANCE BOND:** The apparent successful Vendor shall provide a performance bond in the amount of $250,000.00 . The performance bond must be issued and received by the Purchasing Division prior to Contract award. On construction contracts, the performance bond must be 100% of the Contract value.

☐ **LABOR/MATERIAL PAYMENT BOND:** The apparent successful Vendor shall provide a labor/material payment bond in the amount of 100% of the Contract value. The labor/material payment bond must be issued and delivered to the Purchasing Division prior to Contract award.

In lieu of the Bid Bond, Performance Bond, and Labor/Material Payment Bond, the Vendor may provide certified checks, cashier's checks, or irrevocable letters of credit. Any certified check, cashier's check, or irrevocable letter of credit provided in lieu of a bond must be of the same amount and delivered on the same schedule as the bond it replaces. A letter of credit submitted in lieu of a performance and labor/material payment bond will only be allowed for projects under $100,000. Personal or business checks are not acceptable.

☐ **MAINTENANCE BOND:** The apparent successful Vendor shall provide a two (2) year maintenance bond covering the roofing system. The maintenance bond must be issued and delivered to the Purchasing Division prior to Contract award.

☑ **WORKERS' COMPENSATION INSURANCE:** The apparent successful Vendor shall have appropriate workers' compensation insurance and shall provide proof thereof upon request.

☑ **INSURANCE:** The apparent successful Vendor shall furnish proof of the following insurance prior to Contract award and shall list the state as a certificate holder:

☑ **Commercial General Liability Insurance:**
$1,000,000.00 minimum or more.

☐ **Builders Risk Insurance:** builders risk – all risk insurance in an amount equal to 100% of the amount of the Contract.

☑ Professional Liability - $1,000,000.00 minimum

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The apparent successful Vendor shall also furnish proof of any additional insurance requirements contained in the specifications prior to Contract award regardless of whether or not that insurance requirement is listed above.

☐ **LICENSE(S) / CERTIFICATIONS / PERMITS:** In addition to anything required under the Section entitled Licensing, of the General Terms and Conditions, the apparent successful Vendor shall furnish proof of the following licenses, certifications, and/or permits prior to Contract award, in a form acceptable to the Purchasing Division.

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The apparent successful Vendor shall also furnish proof of any additional licenses or certifications contained in the specifications prior to Contract award regardless of whether or not that requirement is listed above.

9. **LITIGATION BOND:** The Director reserves the right to require any Vendor that files a protest of an award to submit a litigation bond in the amount equal to one percent of the lowest bid submitted or $5,000, whichever is greater. The entire amount of the bond shall be forfeited if the hearing officer determines that the protest was filed for frivolous or improper purpose, including but not limited to, the purpose of harassing, causing unnecessary delay, or needless expense for the Agency. All litigation bonds shall be made payable to the Purchasing Division. In lieu of a bond, the protester may submit a cashier's check or certified check payable to the Purchasing Division. Cashier's or certified checks will be deposited with and held by the State Treasurer's office. If it is determined that the protest has not been filed for frivolous or improper purpose, the bond or deposit shall be returned in its entirety.

10. **ALTERNATES:** Any model, brand, or specification listed herein establishes the acceptable level of quality only and is not intended to reflect a preference for, or in any way favor, a particular brand or vendor. Vendors may bid alternates to a listed model or brand provided that the alternate is at least equal to the model or brand and complies with the required specifications. The equality of any alternate being bid shall be determined by the State at its sole discretion. Any Vendor bidding an alternate model or brand should clearly identify the alternate items in its bid and should include manufacturer's specifications, industry literature, and/or any other relevant documentation demonstrating the equality of the alternate items. Failure to provide information for alternate items may be grounds for rejection of a Vendor's bid.

11. **EXCEPTIONS AND CLARIFICATIONS:** The Solicitation contains the specifications that shall form the basis of a contractual agreement. Vendor shall clearly mark any exceptions, clarifications, or

other proposed modifications in its bid. Exceptions to, clarifications of, or modifications of a requirement or term and condition of the Solicitation may result in bid disqualification.

12. **LIQUIDATED DAMAGES:** Vendor shall pay liquidated damages in the amount for

This clause shall in no way be considered exclusive and shall not limit the State or Agency's right to pursue any other available remedy.

13. **ACCEPTANCE/REJECTION:** The State may accept or reject any bid in whole, or in part. Vendor's signature on its bid signifies acceptance of the terms and conditions contained in the Solicitation and Vendor agrees to be bound by the terms of the Contract, as reflected in the Purchase Order, upon receipt.

14. **REGISTRATION:** Prior to Contract award, the apparent successful Vendor must be properly registered with the West Virginia Purchasing Division and must have paid the $125 fee if applicable.

15. **COMMUNICATION LIMITATIONS:** In accordance with West Virginia Code of State Rules §148-1-6.6, communication with the State of West Virginia or any of its employees regarding this Solicitation during the solicitation, bid, evaluation or award periods, except through the Purchasing Division, is strictly prohibited without prior Purchasing Division approval. Purchasing Division approval for such communication is implied for all agency delegated and exempt purchases.

16. **FUNDING:** This Contract shall continue for the term stated herein, contingent upon funds being appropriated by the Legislature or otherwise being made available. In the event funds are not appropriated or otherwise made available, this Contract becomes void and of no effect beginning on July 1 of the fiscal year for which funding has not been appropriated or otherwise made available.

17. **PAYMENT:** Payment in advance is prohibited under this Contract. Payment may only be made after the delivery and acceptance of goods or services. The Vendor shall submit invoices, in arrears, to the Agency at the address on the face of the purchase order labeled "Invoice To."

18. **UNIT PRICE:** Unit prices shall prevail in cases of a discrepancy in the Vendor's bid.

19. **DELIVERY:** All quotations are considered freight on board destination ("F.O.B. destination") unless alternate shipping terms are clearly identified in the bid. Vendor's listing of shipping terms that contradict the shipping terms expressly required by this Solicitation may result in bid disqualification.

20. **INTEREST:** Interest attributable to late payment will only be permitted if authorized by the West Virginia Code. Presently, there is no provision in the law for interest on late payments.

21. **PREFERENCE:** Vendor Preference may only be granted upon written request and only in accordance with the West Virginia Code § 5A-3-37 and the West Virginia Code of State Rules. A Resident Vendor Certification form has been attached hereto to allow Vendor to apply for the preference. Vendor's

failure to submit the Resident Vendor Certification form with its bid will result in denial of Vendor Preference. Vendor Preference does not apply to construction projects.

22. **SMALL, WOMEN-OWNED, OR MINORITY-OWNED BUSINESSES:** For any solicitations publicly advertised for bid on or after July 1, 2012, in accordance with West Virginia Code §5A-3-37(a)(7) and W. Va. CSR § 148-22-9, any non-resident vendor certified as a small, women-owned, or minority-owned business under W. Va. CSR § 148-22-9 shall be provided the same preference made available to any resident vendor. Any non-resident small, women-owned, or minority-owned business must identify itself as such in writing, must submit that writing to the Purchasing Division with its bid, and must be properly certified under W. Va. CSR § 148-22-9 prior to submission of its bid to receive the preferences made available to resident vendors. Preference for a non-resident small, women-owned, or minority owned business shall be applied in accordance with W. Va. CSR § 148-22-9.

23. **TAXES:** The Vendor shall pay any applicable sales, use, personal property or any other taxes arising out of this Contract and the transactions contemplated thereby. The State of West Virginia is exempt from federal and state taxes and will not pay or reimburse such taxes.

24. **CANCELLATION:** The Purchasing Division Director reserves the right to cancel this Contract immediately upon written notice to the vendor if the materials or workmanship supplied do not conform to the specifications contained in the Contract. The Purchasing Division Director may cancel any purchase or Contract upon 30 days written notice to the Vendor in accordance with West Virginia Code of State Rules § 148-1-7.16.2.

25. **WAIVER OF MINOR IRREGULARITIES:** The Director reserves the right to waive minor irregularities in bids or specifications in accordance with West Virginia Code of State Rules § 148-1-4.6.

26. **TIME:** Time is of the essence with regard to all matters of time and performance in this Contract.

27. **APPLICABLE LAW:** This Contract is governed by and interpreted under West Virginia law without giving effect to its choice of law principles. Any information provided in specification manuals, or any other source, verbal or written, which contradicts or violates the West Virginia Constitution, West Virginia Code or West Virginia Code of State Rules is void and of no effect.

28. **COMPLIANCE:** Vendor shall comply with all applicable federal, state, and local laws, regulations and ordinances. By submitting a bid, Vendors acknowledge that they have reviewed, understand, and will comply with all applicable law.

29. **PREVAILING WAGE:** On any contract for the construction of a public improvement, Vendor and any subcontractors utilized by Vendor shall pay a rate or rates of wages which shall not be less than the fair minimum rate or rates of wages (prevailing wage), as established by the West Virginia Division of Labor under West Virginia Code §§ 21-5A-1 et seq. and available at http://www.sos.wv.gov/administrative-law/wagerates/Pages/default.aspx. Vendor shall be responsible for ensuring compliance with prevailing wage requirements and determining when prevailing wage

requirements are applicable. The required contract provisions contained in West Virginia Code of State Rules § 42-7-3 are specifically incorporated herein by reference.

30. **ARBITRATION:** Any references made to arbitration contained in this Contract, Vendor's bid, or in any American Institute of Architects documents pertaining to this Contract are hereby deleted, void, and of no effect.

31. **MODIFICATIONS:** This writing is the parties' final expression of intent. Notwithstanding anything contained in this Contract to the contrary, no modification of this Contract shall be binding without mutual written consent of the Agency, and the Vendor, with approval of the Purchasing Division and the Attorney General's office (Attorney General approval is as to form only). **No Change shall be implemented by the Vendor until such time as the Vendor receives an approved written change order from the Purchasing Division.**

32. **WAIVER:** The failure of either party to insist upon a strict performance of any of the terms or provision of this Contract, or to exercise any option, right, or remedy herein contained, shall not be construed as a waiver or a relinquishment for the future of such term, provision, option, right, or remedy, but the same shall continue in full force and effect. Any waiver must be expressly stated in writing and signed by the waiving party.

33. **SUBSEQUENT FORMS:** The terms and conditions contained in this Contract shall supersede any and all subsequent terms and conditions which may appear on any form documents submitted by Vendor to the Agency or Purchasing Division such as price lists, order forms, invoices, sales agreements, or maintenance agreements, and includes internet websites or other electronic documents. Acceptance or use of Vendor's forms does not constitute acceptance of the terms and conditions contained thereon.

34. **ASSIGNMENT**: Neither this Contract nor any monies due, or to become due hereunder, may be assigned by the Vendor without the express written consent of the Agency, the Purchasing Division, the Attorney General's office (as to form only), and any other government agency or office that may be required to approve such assignments. Notwithstanding the foregoing, Purchasing Division approval may or may not be required on certain agency delegated or exempt purchases.

35. **WARRANTY**: The Vendor expressly warrants that the goods and/or services covered by this Contract will: (a) conform to the specifications, drawings, samples, or other description furnished or specified by the Agency; (b) be merchantable and fit for the purpose intended; and (c) be free from defect in material and workmanship.

36. **STATE EMPLOYEES:** State employees are not permitted to utilize this Contract for personal use and the Vendor is prohibited from permitting or facilitating the same.

37. **BANKRUPTCY**: In the event the Vendor files for bankruptcy protection, the State of West Virginia may deem this Contract null and void, and terminate this Contract without notice.

38. [RESERVED]

39. **CONFIDENTIALITY**: The Vendor agrees that it will not disclose to anyone, directly or indirectly, any such personally identifiable information or other confidential information gained from the Agency, unless the individual who is the subject of the information consents to the disclosure in writing or the disclosure is made pursuant to the Agency's policies, procedures, and rules. Vendor further agrees to comply with the Confidentiality Policies and Information Security Accountability Requirements, set forth in http://www.state.wv.us/admin/purchase/privacy/default.html.

40. **DISCLOSURE:** Vendor's response to the Solicitation and the resulting Contract are considered public documents and will be disclosed to the public in accordance with the laws, rules, and policies governing the West Virginia Purchasing Division. Those laws include, but are not limited to, the Freedom of Information Act found in West Virginia Code § 29B-1-1 et seq.

    If a Vendor considers any part of its bid to be exempt from public disclosure, Vendor must so indicate by specifically identifying the exempt information, identifying the exemption that applies, providing a detailed justification for the exemption, segregating the exempt information from the general bid information, and submitting the exempt information as part of its bid but in a segregated and clearly identifiable format. Failure to comply with the foregoing requirements will result in public disclosure of the Vendor's bid without further notice. A Vendor's act of marking all or nearly all of its bid as exempt is not sufficient to avoid disclosure and WILL NOT BE HONORED. Vendor's act of marking a bid or any part thereof as "confidential" or "proprietary" is not sufficient to avoid disclosure and WILL NOT BE HONORED. In addition, a legend or other statement indicating that all or substantially all of the bid is exempt from disclosure is not sufficient to avoid disclosure and WILL NOT BE HONORED. Vendor will be required to defend any claimed exemption for nondiclosure in the event of an administrative or judicial challenge to the State's nondisclosure. Vendor must indemnify the State for any costs incurred related to any exemptions claimed by Vendor. Any questions regarding the applicability of the various public records laws should be addressed to your own legal counsel prior to bid submission.

41. **LICENSING:** In accordance with West Virginia Code of State Rules §148-1-6.1.7, Vendor must be licensed and in good standing in accordance with any and all state and local laws and requirements by any state or local agency of West Virginia, including, but not limited to, the West Virginia Secretary of State's Office, the West Virginia Tax Department, West Virginia Insurance Commission, or any other state agency or political subdivision. Upon request, the Vendor must provide all necessary releases to obtain information to enable the Purchasing Division Director or the Agency to verify that the Vendor is licensed and in good standing with the above entities.

42. **ANTITRUST:** In submitting a bid to, signing a contract with, or accepting a Purchase Order from any agency of the State of West Virginia, the Vendor agrees to convey, sell, assign, or transfer to the State of West Virginia all rights, title, and interest in and to all causes of action it may now or hereafter acquire under the antitrust laws of the United States and the State of West Virginia for price fixing and/or unreasonable restraints of trade relating to the particular commodities or services purchased or acquired by the State of West Virginia. Such assignment shall be made and become effective at the time the

purchasing agency tenders the initial payment to Vendor.

43. **VENDOR CERTIFICATIONS:** By signing its bid or entering into this Contract, Vendor certifies (1) that its bid was made without prior understanding, agreement, or connection with any corporation, firm, limited liability company, partnership, person or entity submitting a bid for the same material, supplies, equipment or services; (2) that its bid is in all respects fair and without collusion or fraud; (3) that this Contract is accepted or entered into without any prior understanding, agreement, or connection to any other entity that could be considered a violation of law; and (4) that it has reviewed this RFQ in its entirety; understands the requirements, terms and conditions, and other information contained herein. Vendor's signature on its bid also affirms that neither it nor its representatives have any interest, nor shall acquire any interest, direct or indirect, which would compromise the performance of its services hereunder. Any such interests shall be promptly presented in detail to the Agency.

    The individual signing this bid on behalf of Vendor certifies that he or she is authorized by the Vendor to execute this bid or any documents related thereto on Vendor's behalf; that he or she is authorized to bind the Vendor in a contractual relationship; and that, to the best of his or her knowledge, the Vendor has properly registered with any State agency that may require registration.

44. **PURCHASING CARD ACCEPTANCE:** The State of West Virginia currently utilizes a Purchasing Card program, administered under contract by a banking institution, to process payment for goods and services. The Vendor must accept the State of West Virginia's Purchasing Card for payment of all orders under this Contract unless the box below is checked.

    ☑ Vendor is not required to accept the State of West Virginia's Purchasing Card as payment for all goods and services.

45. **VENDOR RELATIONSHIP:** The relationship of the Vendor to the State shall be that of an independent contractor and no principal-agent relationship or employer-employee relationship is contemplated or created by this Contract. The Vendor as an independent contractor is solely liable for the acts and omissions of its employees and agents. Vendor shall be responsible for selecting,

    supervising, and compensating any and all individuals employed pursuant to the terms of this Solicitation and resulting contract. Neither the Vendor, nor any employees or subcontractors of the Vendor, shall be deemed to be employees of the State for any purpose whatsoever. Vendor shall be exclusively responsible for payment of employees and contractors for all wages and salaries, taxes, withholding payments, penalties, fees, fringe benefits, professional liability insurance premiums, contributions to insurance and pension, or other deferred compensation plans, including but not limited to, Workers' Compensation and Social Security obligations, licensing fees, *etc.* and the filing of all necessary documents, forms and returns pertinent to all of the foregoing. Vendor shall hold harmless the State, and shall provide the State and Agency with a defense against any and all claims including, but not limited to, the foregoing payments, withholdings, contributions, taxes, Social Security taxes, and employer income tax returns.

46. **INDEMNIFICATION:** The Vendor agrees to indemnify, defend, and hold harmless the State and the Agency, their officers, and employees from and against: (1) Any claims or losses for services rendered

by any subcontractor, person, or firm performing or supplying services, materials, or supplies in connection with the performance of the Contract; (2) Any claims or losses resulting to any person or entity injured or damaged by the Vendor, its officers, employees, or subcontractors by the publication, translation, reproduction, delivery, performance, use, or disposition of any data used under the Contract in a manner not authorized by the Contract, or by Federal or State statutes or regulations; and (3) Any failure of the Vendor, its officers, employees, or subcontractors to observe State and Federal laws including, but not limited to, labor and wage and hour laws.

47. **PURCHASING AFFIDAVIT:** In accordance with West Virginia Code § 5A-3-10a, all Vendors are required to sign, notarize, and submit the Purchasing Affidavit stating that neither the Vendor nor a related party owe a debt to the State in excess of $1,000. The affidavit must be submitted prior to award, but should be submitted with the Vendor's bid. A copy of the Purchasing Affidavit is included herewith.

48. **ADDITIONAL AGENCY AND LOCAL GOVERNMENT USE:** This Contract may be utilized by and extends to other agencies, spending units, and political subdivisions of the State of West Virginia; county, municipal, and other local government bodies; and school districts ("Other Government Entities"). This Contract shall be extended to the aforementioned Other Government Entities on the same prices, terms, and conditions as those offered and agreed to in this Contract. If the Vendor does not wish to extend the prices, terms, and conditions of its bid and subsequent contract to the Other Government Entities, the Vendor must clearly indicate such refusal in its bid. A refusal to extend this Contract to the Other Government Entities shall not impact or influence the award of this Contract in any manner.

49. **CONFLICT OF INTEREST:** Vendor, its officers or members or employees, shall not presently have or acquire any interest, direct or indirect, which would conflict with or compromise the performance of its obligations hereunder. Vendor shall periodically inquire of its officers, members and employees to ensure that a conflict of interest does not arise. Any conflict of interest discovered shall be promptly presented in detail to the Agency.

50. **REPORTS:** Vendor shall provide the Agency and/or the Purchasing Division with the following reports identified by a checked box below:

☑ Such reports as the Agency and/or the Purchasing Division may request. Requested reports may include, but are not limited to, quantities purchased, agencies utilizing the contract, total contract expenditures by agency, etc.

☐ Quarterly reports detailing the total quantity of purchases in units and dollars, along with a listing of purchases by agency. Quarterly reports should be delivered to the Purchasing Division via email at purchasing.requisitions@wv.gov.

51. **BACKGROUND CHECK:** In accordance with W. Va. Code § 15-2D-3, the Director of the Division of Protective Services shall require any service provider whose employees are regularly employed on the grounds or in the buildings of the Capitol complex or who have access to sensitive or critical information to submit to a fingerprint-based state and federal background inquiry through the state

repository. The service provider is responsible for any costs associated with the fingerprint-based state and federal background inquiry.

After the contract for such services has been approved, but before any such employees are permitted to be on the grounds or in the buildings of the Capitol complex or have access to sensitive or critical information, the service provider shall submit a list of all persons who will be physically present and working at the Capitol complex to the Director of the Division of Protective Services for purposes of verifying compliance with this provision.

The State reserves the right to prohibit a service provider's employees from accessing sensitive or critical information or to be present at the Capitol complex based upon results addressed from a criminal background check.

Service providers should contact the West Virginia Division of Protective Services by phone at (304) 558-9911 for more information.

52. **PREFERENCE FOR USE OF DOMESTIC STEEL PRODUCTS:** Except when authorized by the Director of the Purchasing Division pursuant to W. Va. Code § 5A-3-56, no contractor may use or supply steel products for a State Contract Project other than those steel products made in the United States. A contractor who uses steel products in violation of this section may be subject to civil penalties pursuant to W. Va. Code § 5A-3-56. As used in this section:

    a. "State Contract Project" means any erection or construction of, or any addition to, alteration of or other improvement to any building or structure, including, but not limited to, roads or highways, or the installation of any heating or cooling or ventilating plants or other equipment, or the supply of and materials for such projects, pursuant to a contract with the State of West Virginia for which bids were solicited on or after June 6, 2001.

    b. "Steel Products" means products rolled, formed, shaped, drawn, extruded, forged, cast, fabricated or otherwise similarly processed, or processed by a combination of two or more or

    such operations, from steel made by the open heath, basic oxygen, electric furnace, Bessemer or other steel making process.

The Purchasing Division Director may, in writing, authorize the use of foreign steel products if:

    a. The cost for each contract item used does not exceed one tenth of one percent (.1%) of the total contract cost or two thousand five hundred dollars ($2,500.00), whichever is greater. For the purposes of this section, the cost is the value of the steel product as delivered to the project; or

    b. The Director of the Purchasing Division determines that specified steel materials are not produced in the United States in sufficient quantity or otherwise are not reasonably available to meet contract requirements.

53. **PREFERENCE FOR USE OF DOMESTIC ALUMINUM, GLASS, AND STEEL:** In Accordance

with W. Va. Code § 5-19-1 et seq., and W. Va. CSR § 148-10-1 et seq., for every contract or subcontract, subject to the limitations contained herein, for the construction, reconstruction, alteration, repair, improvement or maintenance of public works or for the purchase of any item of machinery or equipment to be used at sites of public works, only domestic aluminum, glass or steel products shall be supplied unless the spending officer determines, in writing, after the receipt of offers or bids, (1) that the cost of domestic aluminum, glass or steel products is unreasonable or inconsistent with the public interest of the State of West Virginia, (2) that domestic aluminum, glass or steel products are not produced in sufficient quantities to meet the contract requirements, or (3) the available domestic aluminum, glass, or steel do not meet the contract specifications. This provision only applies to public works contracts awarded in an amount more than fifty thousand dollars ($50,000) or public works contracts that require more than ten thousand pounds of steel products.

The cost of domestic aluminum, glass, or steel products may be unreasonable if the cost is more than twenty percent (20%) of the bid or offered price for foreign made aluminum, glass, or steel products. If the domestic aluminum, glass or steel products to be supplied or produced in a "substantial labor surplus area", as defined by the United States Department of Labor, the cost of domestic aluminum, glass, or steel products may be unreasonable if the cost is more than thirty percent (30%) of the bid or offered price for foreign made aluminum, glass, or steel products.

This preference shall be applied to an item of machinery or equipment, as indicated above, when the item is a single unit of equipment or machinery manufactured primarily of aluminum, glass or steel, is part of a public works contract and has the sole purpose or of being a permanent part of a single public works project. This provision does not apply to equipment or machinery purchased by a spending unit for use by that spending unit and not as part of a single public works project.

All bids and offers including domestic aluminum, glass or steel products that exceed bid or offer prices including foreign aluminum, glass or steel products after application of the preferences provided in this provision may be reduced to a price equal to or lower than the lowest bid or offer price for foreign aluminum, glass or steel products plus the applicable preference. If the reduced bid or offer prices are made in writing and supersede the prior bid or offer prices, all bids or offers, including the reduced bid or offer prices, will be reevaluated in accordance with this rule.

REQUEST FOR PROPOSAL

West Virginia Department of Education

RFP #

(07-08-13)

Attachment C: Cost Sheet

Cost information below as detailed in the Request for Proposal and submitted in a separate sealed envelope. Cost should be clearly marked.

Other Option Pricing – Vendors should use the pricing page found in Attachment D: Optional Cost Sheet

DELIVERABLE (includes all requirements as described in specifications and mandatories)	**COST**
Project Management Components	
Installation of software	
Installation of hardware	
Data Warehouse	
Print-ready documentation explaining how the DWRS provides protection of educational student and staff data through data encryption, adherence to user-access roles, privacy requirements, and suppression rules	
Within-system, pre-requisite electronic training modules related to security and privacy	
Style Guide for web-based interface and print-on-demand reports	
Implementation of proofing process with signature sign-off procedures for publication readiness	
Designed web-based interface with a topic-driven menu with public-level dashboard display as default with adjustable parameters and a drillable interface for onscreen and downloadable reports	
Customizable Reporting Tools at all user levels (e.g., WVDE programmers, WVDE trainers, WVDE general users, LEA users, school users, public) with adherence to user-access roles, privacy requirements, and suppression rules	
Customizable reports (online and print-ready) from an intuitive and topic-driven menu in exportable formats for various user groups (e.g., WVDE programmers, WVDE trainers, WVDE general users, LEA users, school users, public) with adherence to user-access roles, privacy requirements, and suppression rules	
Standard reports available through the web-based interface	
Tools for the analysis and interpretation of data in reports	
Implementation of training sessions for WVDE programmers with print-ready Training Resources and Training Guide for WVDE programmers	
Implementation of training sessions for WVDE train-the-trainers with print-ready Training Resources and Training Guide for	

REQUEST FOR PROPOSAL

West Virginia Department of Education

RFP

(07-08-13)

WVDE train-the trainers	
Print-ready support documentation for end users	
Electronic End-User Training Modules	
Process Documentation, Business Rules, and Code for the following: • Data Architecture/Model Data Structure • Data Management/Mapping • Extract, Transform, Load (ETL) • Data Staging • Data Validation • Data Certification • Metadata/Data Dictionary	
Delivery of the DWRS and all related materials to WVDE	
Hardware (provide a complete list of items)	
Minor Adjustments (e.g., design elements, report....)*	Hourly Rate:

*Will not be considered in the overall award of the RFP

Overall Total Cost: _____

Invoices need to be worded according to the cost sheet to ensure payment.

If applicable, sign and submit the attached Resident Vendor Preference Certificate with the proposal.

Payment for maintenance and support may only be billed in arrears.

PRE-BID CONFERENCE
SIGN IN SHEET

Request of Proposal/Quotation No: EDD398772 Date: September 11, 2013

FIRM & REPRESENTATIVE NAME	MAILING ADDRESS	TELEPHONE,FAX & E-MAIL
1. SAS Missi Poynter	SAS Campus DR Cary, NC 27513	T: 919-531-0467 F: 919-677-4444 E: Missi.poynter@sas.com
2. Deloitte DON PARR	Suite 820 901 E. Byrd St Richmond, VA 23219	T: 804-514-8244 F: 866-662-7503 E: dparr@deloitte.com
3. Russ Redgate eScholar	222 Bloomingdale Rd Ste 107 White Plains, NY 10605	T: 914-989-2900 F: 914-989-2990 E: rredgate@escholar.com
4. AUTUMN NOLAN Informatica	11710 Plaza America Dr Suite 700 Reston, VA 20190	T: 703-234-8500 F: E: ~~autumn~~ anolan@informatica.com
5. CORKY ALLEN ORACLE	1901 RESTON PKWY RESTON, VA 20190	T: 636-751-5656 F: E: CORKY.ALLEN@ORACLE.COM
6. ED MERKLER IBM	745 WEST NEW CIRCLE RD BLD 6200 LEXINGTON, KY 40511	T: 502-542-1789 F: EJMERKLE@US.IBM.COM E:
7. Charles D. Arnett SIS	207 Association Dr. Suite 219 Charleston WV 25311	T: 304-768-1645 F: 304-768-1631 E: carnett@thinksis.com
8. Jenelle Feldhaus WVDE	1900 Kanawha Blvd E Bldg 6 - Ste 825 Charleston, WV 25305	T: 304-558-7881 F: E: jmosley@access.k12.wv.us
9. Carla Howe WVDE	1900 Kanawha Blvd E Bldg 6 - Ste 825 Charleston, WV 25305	T: 304-558-7881 F: E: chowe@access.k12.wv.us

Please print or write legibly. The fax number is essential to contact the attendees in a timely manner.

PRE-BID CONFERENCE
SIGN IN SHEET

Request of Proposal/Quotation No: EDD398772 Date: September 11, 2013

	FIRM & REPRESENTATIVE NAME	MAILING ADDRESS	TELEPHONE, FAX & E-MAIL
10.	Marshall Patton WVDE	1900 Kanawha Blvd E Bldg 6 RM 825 Charleston, WV 25305	T: 304-558-8869 F: 304-558-2584 E: MPatton@access.k12.wv.us
11.	JoAnn Adkins WVDE	"	T: 304. 558-2686 F: 304. 558. 2790 E: joann.adkins@access.k12.wv.us
12.	Phillip Uy WVDE	" R~204	T: 304 558 2686 F: 304 558 2790 E: puy@access.k12.wv.us
13.			T: F: E:
14.			T: F: E:
15.			T: F: E:
16.			T: F: E:
17.			T: F: E:

Please print or write legibly. The fax number is essential to contact the attendees in a timely manner.

ADDENDUM ACKNOWLEDGEMENT FORM
SOLICITATION NO.: EDD398772

Instructions: Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge addenda may result in bid disqualification.

Acknowledgment: I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

Addendum Numbers Received:
(Check the box next to each addendum received)

[ ]	Addendum No. 1	[ ]	Addendum No. 6
[X]	Addendum No. 2	[ ]	Addendum No. 7
[ ]	Addendum No. 3	[ ]	Addendum No. 8
[ ]	Addendum No. 4	[ ]	Addendum No. 9
[ ]	Addendum No. 5	[ ]	Addendum No. 10

I understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information issued in writing and added to the specifications by an official addendum is binding.

Deloitte Consulting LLP
Company

Philip S. Bernardy
Authorized Signature

October 9, 2013
Date

NOTE: This addendum acknowledgement should be submitted with the bid to expedite document processing.
Revised 6/8/2012

State of West Virginia
Department of Administration
Purchasing Division
2019 Washington Street East
Post Office Box 50130
Charleston, WV 25305-0130

Solicitation

NUMBER	PAGE
EDD398772	1

ADDRESS CORRESPONDENCE TO ATTENTION OF:
CONNIE OSWALD
304-558-2157

VENDOR
RFQ COPY
TYPE NAME/ADDRESS HERE

Deloitte Consulting LLP
2500 One PPG Place
Pittsburgh, PA 15222

SHIP TO
DEPARTMENT OF EDUCATION

BUILDING 6
1900 KANAWHA BOULEVARD, EAST
CHARLESTON, WV
25305-0330

DATE PRINTED
08/28/2013

BID OPENING DATE: 10/02/2013 BID OPENING TIME 1:30PM

LINE	QUANTITY	UOP	CAT. NO.	ITEM NUMBER	UNIT PRICE	AMOUNT

REQUEST FOR PROPOSAL

THE STATE OF WEST VIRGINIA AND ITS AGENCY THE WEST VIRGINIA DEPARTMENT OF EDUCATION LOCATED AT 1900 KANAWHA BLVD., EAST, BLDG. 6 CHARLESTON, WV 25305-0330 REQUEST A PROPOSAL TO ENGAGE THE SERVICES OF A VENDOR TO PROVIDE THE DESIGN, DEVELOPMENT AND IMPLEMENTATION OF A STATEWIDE LONGITUDINAL DATA SYSTEM FOR PRE-K THROUGH 12TH GRADE (P-12) PER THE ATTACHED SPECIFICATIONS, INSTRUCTIONS TO BIDDERS AND TERMS & CONDITIONS.

A NON-MANDATORY PRE-BID MEETING WILL BE HELD ON SEPTEMBER 11, 2013 AT 10:00 AM - SEE INSTRUCTIONS TO BIDDERS ATTACHED.

LINE	QUANTITY	UOP	CAT. NO.	ITEM NUMBER	UNIT PRICE	AMOUNT
0001	1	JB		220-34		

FOR THE DESIGN, DEVELOPMENT, AND IMPLEMENTATION OF

A STATEWIDE LONGITUDINAL DATA SYSTEM FOR PRE-K THROUGH 12TH GRADE (P-12) 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.

SIGNATURE	TELEPHONE	DATE
Philip S. Bernstein	973-602-5311	October 9, 2013
TITLE	**FEIN**	**ADDRESS CHANGES TO BE NOTED ABOVE**
Director	06-1454513	

WHEN RESPONDING TO SOLICITATION, INSERT NAME AND ADDRESS IN SPACE ABOVE LABELED 'VENDOR'

State of West Virginia
Department of Administration
Purchasing Division
2019 Washington Street East
Post Office Box 50130
Charleston, WV 25305-0130

Solicitation

NUMBER	PAGE
EDD398772	2

ADDRESS CORRESPONDENCE TO ATTENTION OF:
CONNIE OSWALD
304-558-2157

VENDOR
RFQ COPY
TYPE NAME/ADDRESS HERE

SHIP TO
DEPARTMENT OF EDUCATION

BUILDING 6
1900 KANAWHA BOULEVARD, EAST
CHARLESTON, WV
25305-0330

DATE PRINTED
08/28/2013

BID OPENING DATE: 10/02/2013 BID OPENING TIME 1:30PM

LINE	QUANTITY	UOP	CAT. NO.	ITEM NUMBER	UNIT PRICE	AMOUNT
	****** THIS IS THE END OF RFQ EDD398772 ****** TOTAL:					

SIGNATURE	TELEPHONE	DATE
Philip S. Barnhart	973-602-5311	October 9, 2013

TITLE	FEIN	
Director	06-1454513	ADDRESS CHANGES TO BE NOTED ABOVE

WHEN RESPONDING TO SOLICITATION, INSERT NAME AND ADDRESS IN SPACE ABOVE LABELED 'VENDOR'

Table of Contents

RFP Reference: Section 5.3, Proposal Format, page 34

Clearly identify the material by section and page number.

Executive Summary

The West Virginia Department of Education (WVDE) seeks a Statewide Longitudinal Data System (SLDS) that will:

- Provide stakeholders with timely access to information
- Allow for the creation of a variety of reports and analysis
- Help the agency implement policies and promote practices to help educators know how to access, analyze and use data appropriately

The Deloitte/eScholar Team is confident that we have the solution, capabilities, and experience required to achieve your objectives. Moreover, we believe there are several aspects of our team, our solution, and our approach that distinguish us from our competitors:

The Deloitte/eScholar team has an unmatched track record of success:

- Successful SLDS implementations in 4 states
- Distinguished record of systems integration services to State of West Virginia agencies

- We are proposing an proven COTS (COTS) solution that:
  - Minimizes risk and delivers benefits faster than a custom developed solution.
  - Has been implemented in eight states.
  - Includes EDEN/EdFacts reporting.
- We have a pragmatic and time-tested approach to SLDS implementations.
- We are proposing the Cognos Business Intelligence tool suite with a report catalog of over 1,000 potential reports we have developed for other state education agencies.
- Our training approach includes instructor led training for WVDE technical staff and train-the-trainer training for reporting and analytics
- We have an outstanding record of service to the State of West Virginia.

We are proposing an established solution that minimizes risk

Our proposed solution includes the leading education data warehouse solution that has been implemented successfully in eight other states. The solution includes a robust data model that adheres to national data standards. The use of a COTS solution significantly reduces the amount of time necessary for design and development activities and leads to a shorter implementation time frame.

Each solution component is described below.

eScholar Complete Data Warehouse

Our solution is comprised of the eScholar Complete Data Warehouse® for K-12 (CDW). The eScholar Complete Data Warehouse® is a COTS solution enabling state education agencies to integrate disparate enterprise-wide data into a centralized data store, allowing longitudinal and cross-departmental analysis to inform data-driven decision making. Leveraging the most comprehensive education data model available in a COTS solution, eScholar's star-schema design unlocks the value of enterprise transactional data so state and local education agencies can gain a complete picture of their organization, from district and school attributes to staff and student demographics and characteristics, enrollment, courses and grades, programs and services, and more.

eScholar's star-schema design unlocks the value of enterprise transactional data so education agencies and institutions can gain a complete picture of their organization, from institution and campus attributes to staff and student demographics and characteristics, enrollment, courses and grades, programs and services, and more.

Of the many benefits of eScholar's CDW, the most relevant to WVDE are:

- The CDW data model supports the integration, cleansing, and analysis of more than 3,000 data elements across 40 data categories or "domains".
- The CDW has built-in processes for data submission, validation, and loading. A routine can contain hundreds of verifications, transformations, and recodes which are essential to getting clean, valid data into a data warehouse.
- The CDW is supported by a company whose only business is education data management with a dedicated staff to support customers, a staffed help desk and a support site,

Cognos Business Intelligence Suite

We are proposing the Cognos Business Intelligence Suite of products for reporting and analysis. In addition to the ability to create and publish standard reports for end-users to run, our proposed solution allows for the creation of custom queries and ad hoc reports. We will provide up to 35 reports, 5 analysis cubes and 5 data extracts to support the P-20 data submissions. The Deloitte/eScholar team has collaborated with several state Education agencies to transform their data into actionable information using Cognos and eScholar.

We have a proven approach to SLDS implementations.

Our approach to the implementation of the WVDE SLDS is based on our team's collective experience from similar implementations. Our approach is built on a foundation of risk mitigation activities including training, communications, broad testing, and knowledge transfer. Our confidence in our team's ability to achieve the milestones described in this proposal is based on our track record of successful similar implementations. These implementations were delivered on or ahead of schedule and on budget. Following our disciplined approach and tailoring our solution to meet WVDE's requirements is not only the low-risk option for WVDE, it is the option that delivers benefits sooner.

We have an outstanding record of service to the State of West Virginia.

Deloitte has a 20-year history of serving the State of West Virginia. We have provided business advisory services, audit services, and technology integration services in both the public and private sectors. During these 20 years, we have worked together in delivering a range of successful state projects, including implementation and maintenance of the Recipient Automated Payment and Information Data System (RAPIDS) and the Child Welfare application (FACTS) for the Department of Health and Human Resources (DHHR). As we have in the past, Deloitte will work in a consultative and collaborative way with the State on this project.

REQUEST FOR PROPOSAL

West Virginia Department of Education

RFP # EDD398772

Attachment A: Vendor Response Sheet

RFP Reference: Attachment A, Response Sheet, page 38

- Provide a response regarding the following :firm and staff qualifications and experience in completing similar projects ; references; copies of any staff certifications or degrees applicable to this project ; proposed staffing plan ; descriptions of past projects completed entailing the location of the project , project manager name and contact information, type of project, and what the project goals and objectives where and how they were met.

As per Attachment A: Vendor Response Sheet, our proposal has been organized into the following sections and sub sections:

- Section 4, Subsection 4.3, Qualification & Experience
- Section 4, Subsection 4.4, Project Goals
  - 4.4.1, Goal I: Architecture, Infrastructure, and Development
  - 4.4.2, Goal II: Technical Support
  - 4.4.3, Goal III: Analysis and Reporting
  - 4.4.4, Goal IV: Professional Development Services
  - 4.4.5, Goal V: Project Management
  - 4.4.6, Goal VI: Transition Strategy

4.3 Qualification and Experience

RFP Reference: Attachment A, Response Sheet, Page 38

Deloitte and eScholar have jointly implemented eScholar-based Statewide Longitudinal Data Systems (SLDS) solutions in four states. The Deloitte/eScholar team brings innovative, pragmatic thinking to WVDE. Deloitte's systems integration experience and unmatched breadth of services — combined with our track record of successful SLDS implementations for State Education Agencies (SEAs) — meet WVDE's requirements now and in the future.

The Deloitte/eScholar team welcomes the opportunity to work with WVDE. One of our clients, the Pennsylvania Department of Education (PDE), was recognized by the Data Quality Campaign and the Council of Chief State School Officers with their *Longitudinal Data System Leadership Award*. This award was for the implementation of PDE's SLDS based on eScholar's CDW for PK-12 and Postsecondary. Please see the corporate qualifications section below for more information about this project. The following table highlights some of the features and benefits of the experience our team brings to WVDE:

Features	Benefits
The Deloitte/eScholar team brings extensive experience and domain knowledge of State Longitudinal Systems (SLDS).	Our team includes resources with extensive experience designing and implementing unique person identification, data collection and validation systems, data warehouse, and decision support portals for SLDS.
Deloitte has an eight-year track record of success with eScholar and implementation of the eScholar COTS solution.	Deloitte has implemented more COTS education data warehouses than any other systems integrator, providing WVDE with the experience and skills required to implement the SLDS on time and on budget.
Our team's thorough understanding of the WVDE's requirements and deep experience with the proposed technologies.	We understand where WVDE wants to go, and we know how to work with you to get you there. Furthermore, we will bring professionals to this project with a wealth of experience using the software and infrastructure proposed for this project.
Experience with educational data and data systems, including knowledge and understanding of FERPA.	Our team has worked through issues related to FERPA implementing SLDS for other states, including an integrated PK-20 system dealing with student data spanning multiple organizations. Our knowledge of what is being done in other states will help WVDE determine that their solution is compliant with FERPA and that WVDE protects the data of its students and staff.

Figure 4.3-1. Our Team's Experience Features and Benefits.
Our team has the right mixture of experience to deliver for WVDE.

4.3.1 Detailed Narrative of Company

4.3.1.a About Deloitte

RFP Reference: Section 4.3. Qualifications and Experience, page, 24

4.3.1 The Vendor's proposal must consist of a detailed narrative that describes its company, including but not limited to

- 4.3.I.a. The Vendor's origin, mission, historical growth (including when the company was established), and the hours of operation of the Vendor that proposed to perform services required by this RFP.

Deloitte LLP, whose subsidiaries rank among the nation's leading professional services organizations in audit, tax, consulting, and financial advisory services in 20 industries, has a workforce of over 56,000. Known as an employer of choice for innovative human resources programs, Deloitte LLP is dedicated to helping clients and people excel. Deloitte LLP is the U.S. member firm of Deloitte Touche Tohmatsu Limited. The U.S. subsidiaries include:

- **Deloitte Consulting LLP:** Provides services in three key areas — human capital, strategy and operations, and technology services.
- **Deloitte Tax LLP:** Provides consulting and compliance services for tax issues from local to international.
- **Deloitte & Touche LLP:** Provides audit and enterprise risk services.
- **Deloitte Financial Advisory Services LLP:** Provides business advisory, valuation, fraud and dispute resolution services.

Deloitte LLP and most of its subsidiaries (including Deloitte & Touche LLP, Deloitte Consulting LLP, Deloitte Tax LLP, Deloitte Financial Advisory Services LLP, and Deloitte Services LP) are organized in the State of Delaware and are headquartered at 30 Rockefeller Plaza, New York, NY 10112. Deloitte maintains a Charleston Office (1012 Kanawha Blvd East) that serves the Recipient Automated Payment and Information Data System (RAPIDS) project and associated WV Department of Health and Human Resources Staff. Deloitte maintains normal business hours, and project staff can often be reached or found working around the clock for our clients.

Deloitte has been serving clients with distinction for over 100 years. The first Deloitte predecessor organization was founded in 1895. In 1989, the practices of Deloitte Haskins & Sells and Touche Ross & Co. combined under the name Deloitte & Touche. In 1994, Deloitte & Touche registered in Delaware as a limited liability partnership (LLP) under the name Deloitte & Touche LLP with Deloitte Consulting LLP being organized as a limited liability partnership in Delaware in 2003. We operate under the global umbrella of Deloitte Touche Tohmatsu Limited (DTTL), which employs over 190,000 people.

About Deloitte Consulting LLP

Deloitte Consulting LLP (Deloitte) is one of the world's leading consulting organizations for business strategy, operations, technology, and human resource planning. We bring together a unique combination of experience, scale, and capabilities to help clients address their most complex business problems. Our unique organizational structure and our collaborative approach integrate

> "Deloitte's strategy is to use its breadth of services, geographic reach, and industry expertise to serve clients of all sizes with an exceptionally well-integrated perspective and with flexibility and pragmatism."

Source: Kennedy Consulting Research & Advisory
Global Consulting Marketplace 2010-2013;

consulting with tax solutions, financial advisory services, and risk management capabilities. Clients depend on us for straightforward advice and results that create value.

We believe that drawing upon a combination of disciplines, which include consulting, finance, tax, and risk, allows us to address your most complex business issues from each angle. By combining these best-in-class resources, we are able to develop and implement innovative solutions that create greater value for clients like WVDE.

Our Public Sector Practice

Deloitte U.S. Firms' Public Sector professionals are focused on delivering value-added business solutions to our clients' complex issues. Driven by our reputation and strong commitment for excellence, our people work together to bring the top level of service to our clients. Comprehensive solutions, strong capabilities, client confidence, and a collaborative culture are traits of our Public Sector Practice.

The Deloitte U.S. Firms' Public Sector Practice is fortunate to work on the nation's pressing issues alongside some of the most innovative and creative minds in the government. This collaboration has yielded impressive results.

We draw upon the combination of audit, consulting, tax, and financial advisory services to understand and evaluate client issues more broadly and more deeply than other companies. Our understanding of the regulatory environment and federal, state, and local programs drives rich solutions that are sustainable and reflect the complexity of our clients' day-to-day operations.

- Deloitte is No. 27 on Washington Technology's Top 100 for 2012, an annual ranking of the largest government contractors.
- For the 13th year, Deloitte has earned a place on Fortune magazine's list of "100 Best Companies to Work For."
- Deloitte Consulting takes the top spot in Vault's Top 25 Tech Consulting firms for 2012, and maintains its No. 3 spot in the areas of prestige and diversity.

Building on over 100 years of service, we are committed to delivering consistent, high-quality service, enabling our clients to deliver extraordinary advantages to their constituents. Deloitte U.S. Firms' national Public Sector practice comprises more than 2,000 cross-functional professionals dedicated to serving various government-related entities, including federal civilian and defense agencies, cities, counties, states, colleges, universities, public retirement systems, housing authorities, school districts, workforce agencies, welfare agencies, childcare assistance entities, lotteries, mass transit authorities, ports, airports, and cultural complexes. The result of this dedication is a key group of professionals who can apply industry leading practices in strategy, scenario planning, operations improvement, systems integration, human capital, and outsourcing specifically to government agencies. We continually invest in the development of creative consultants with an unmatched blend of business acumen, industry practice, and technical knowledge. Our consultants are able to address the broad range of issues facing organizations and give our clients the personal attention that can make a difference in the people's lives they serve.

Deloitte understands the nature and the intensity of the "fires" that are fought daily in an intricate political environment. We speak the same language and we bring a deep understanding of the complexities of agency operations. Our collaborative culture enables client service teams to draw across functions and

industries to deliver solutions tailored to your agency. Deloitte's people are dedicated to providing high-quality client service with professional objectivity and to work diligently to preserve the trust of our clients and the public. Our goal is to provide the knowledge, judgment, and experience to help clients address the challenges they face in managing their organization.

Deloitte's Commitment to West Virginia

Deloitte has a 20-year history of serving the State of West Virginia. We have provided business advisory services, audit services, and technology integration services in both the public and private sectors. During these 20 years, we have worked together in delivering a range of successful state projects, including implementation and maintenance of West Virginia Financial Information Management System (WVFIMS), RAPIDS and FACTS for DHHR, GAAP conversion project, audit work, and workers compensation. As we have in the past, Deloitte will work in a consultative and collaborative way with the State on this project.

Select highlights from our collaborations with West Virginia include:

Department of Health and Human Resources

- **RAPIDS.** Various projects over many years, including incremental renewal of legacy Recipient Automated Payment and Information Data System (RAPIDS) to the Web-based eRAPIDS, Information Network for Resident Online Access and Delivery of Services (inROADS), and RAPIDS Analysis and Formatting Tool (RAFT).

  In recent years, West Virginia DHHR and Deloitte received the following awards as a result of our team effort to support the citizens of WV:

  - In 2011, the Center for Digital Government's Best Fit Integrator Project Award, which recognizes an integrator's role in modernization efforts that extend the value of existing systems and prepares them for further seasons of public service delivery.
  - In 2011, the Computerworld Honors Program Laureate for the eRAPIDS Work Programs project, which developed a technology-driven business solution for West Virginia's cash assistance for needy families program, known as WV Works.
  - In 2011, the eRAPIDS Client Scheduling module was recognized by the West Virginia Information Technology Summit under the category of "Best In-House Developed Solution".
  - In 2010, the eRAPIDS Work Programs module was recognized by the West Virginia Information Technology Summit under the category of "Best Application Serving an Agency's Business Needs".
  - In 2009, WV inROADS My Benefits Account was recognized by the West Virginia Information Technology Summit under the category of Information Communications Technology Innovations.

- **FACTS.** Child welfare application development and implementation.

Deloitte's long-standing commitment to West Virginia is more than just project work. Deloitte has an established, proven commitment to be a responsible corporate citizen. Many businesses face the challenge of understanding their civic duties as they relate to the environment in which they operate. Some have lost sight of their role in the local market. Being a private entity, Deloitte has the flexibility to construct a more

holistic approach to our involvement in the community. As such, we take our role as a responsible corporate citizen seriously.

Education Commitment

Our commitment to education includes building relationships with academic institutions through funding, sharing industry insights for students' career growth, and providing career opportunities to students. Deloitte invests in West Virginia education, including:

- Designating West Virginia University (WVU) as a recruiting school for our accounting and technology undergraduate recruiting programs
- Participating in career fairs, providing internships to top students, and recruiting students through the West Virginia University system for full-time employment
- Employing 52 WVU and Marshall alumni full time within our organization; among the 52 employees, 13 alumni serve in leadership roles in the organization (10 partner/principals and three directors)
- Serving on the board of advisors for the WVU College of Business and Economics (Glen Fienberg)

Social Accountability

Social accountability begins with a volunteer-based effort targeted toward serving the community. Our community involvement demonstrates our commitment to not only the success of our clients, but also to the citizens of the State of West Virginia. Through our Global IMPACT Day program, Deloitte employees volunteer at any number of worthy community organizations, schools, and health care institutions in lieu of their normal work responsibilities for one day a year. Through the years we have dedicated our time to local organizations, such as Holz Elementary School, Ronald McDonald House, American Diabetes Association, Kanawha County Humane Society, and Gabriel Project.

In addition to IMPACT Day programs, our organization has made significant contributions to some of the local organizations, such as Presley Ridge Schools, MDA, Make a Wish foundation, Gabriel Project, and United Way.

Deloitte has partnered with the State of West Virginia for more than 20 years. We are committed to providing quality service to the citizens of the state. As a partner who has the depth of resources in critical areas of education, technology, business process, and end-user implementation needs, we are excited and are looking forward to opportunities in the future.

Did you know

Deloitte's national education practice serves Early Childhood, P-12 and Higher Education clients across the country and has implemented eScholar-based SLDS in four states.

Deloitte's P-20 Education Practice

Deloitte is one of the leading professional services organizations serving school districts, state departments of education, and colleges and universities today. We couple a deep understanding of education programs and operations with practical approaches to getting things done on time and within budget. Our dedicated practitioners have deep experience and specialize in each aspect of education including management, operations, and information technology. Our tradition of success is driven by our commitment to a collaborative relationship with

our clients, our strong project management capability, and our demonstrated knowledge of the education programs and policy. We work closely with our clients, emphasizing knowledge transfer and development of permanent internal technical and change leadership capabilities. Our depth and breadth of experience greatly improves our ability to identify and manage the issues that are specific to education.

4.3.1.b - 4.3.1.e Deloitte's State Education Agency Experience

RFP Reference: Section 4.3. Qualifications and Experience, page, 24

4.3.1 The Vendor's proposal must consist of a detailed narrative that describes its company, including but not limited to

- 4.3.1.b. Prior experience developing and successfully implementing statewide or large district projects including a data warehouse and reporting solution for a statewide educational agency or major metropolitan school district within the past five years. These projects should be comparable in size or larger than the proposed solution for the WVDE, its 55 Local Education Agencies , and its 600+ schools and 200,000+ student populations.
- 4.3.1.c. Description and methodology of education-related projects.
- .3.1.c. Description and methodology of education-related projects.
- 4.3.l.d. Description of educational expertise, qualifications, certification, etc.
- 4.3.l.e. Any relevant experience that indicates the qualifications of the Vendor, and any subcontractors, in the performance of this contract.

An important feature of our education experience is our track record of successful service to SEAs. Our services include:

- Unique staff and student identifier system implementations
- Data warehouse design and implementation
- Enterprise information management/business intelligence applications including scorecards and dashboards
- Systems integration including Statewide Longitudinal Data Systems (SLDS)
- Business process redesign
- Organization redesign
- Organizational change management including training, communications, and outreach and support

The table below lists the SEAs we have successfully served over the last several years:

Client	Project
Pennsylvania Department of Education	Statewide Unique Student Identification System for Early Childhood to Postsecondary (PAsecureID) Statewide COTS PK-16 SLDS (PIMS)
North Carolina Department of Public Instruction	Statewide Unique Student and Staff Identification System (NCUID) Statewide COTS PK-12 SLDS (CEDARS)
New Mexico Public Education Department	Statewide Unique Student Identification System Statewide COTS PK-12 SLDS (STARS)
Nebraska Department of Education	Statewide Unique Student Identification System Statewide COTS PK-12 SLDS (NSSRS)
Massachusetts Department of Education	Statewide Educator Licensure System PK-16 Data Warehouse

Client	Project
Maryland State Department of Education	Statewide Unique Student and Staff Identification System Statewide Custom K-12 SLDS
Georgia Governor's Office of Student Achievement	Statewide Early Childhood, K-12, Higher Education, and Workforce Data Warehouse and Reporting System
South Dakota Department of Education	SLDS planning
Colorado Department of Education	Custom Web-based Data Collection System Advisor for SLDS planning including federal grant applications

Figure 4.3-2. Deloitte's Recent SEA Experience.
Our team has extensive experience serving SEAs.

Deloitte's School District Experience

In addition to our experience with State Education Agencies we also have a track record of successful service to both large and small school districts. Our practitioners possess an in-depth understanding of specific programs and support services found in districts including:

- Finance and Budgeting
- Governance and Administration
- Human Resources
- Maintenance and Operations
- Management and Instructional Technology
- Purchasing and Warehousing
- Food Services

- The Deloitte Foundation has contributed more than $60M to education over the past decade
- Over $10M in endowed professorships, fellowships and chairs have been established at universities across the U.S. and over 1,000 Ph.Ds. have been supported through the foundation's Doctoral Fellowship Program
- $5M in matching gifts was paid last fall in support of 390 schools

Deloitte's Commitment to Education

Deloitte is also committed to furthering education through our partnerships with not-for-profit organizations, including United Way, College Summit and City Year.

College Summit is a national nonprofit founded in 1995. It partners with school districts to increase their college admission rates by fostering a high school culture where college admission is the expectation, not the exception. College Summit is the largest provider of college admission culture support in the United States, currently reaching 25,000 students at 180 schools in 12 states and the District of Columbia. Deloitte and College Summit were recently recognized by the United States Chamber of Commerce for their collaboration to create a "college admission culture" in U.S. high schools and make college admission the norm in America.

City Year's mission is to build democracy through citizen service, civic engagement and social entrepreneurship. The organization works to realize this mission by recruiting, training and deploying young people 18-25 years of age into inner city schools to mentor, teach, and coach in the classrooms. In 2009, after years of aligning with City Year on a local level, Deloitte increased its support by becoming a National

Leadership Sponsor, City Year's highest level of corporate partnership. Our multi-year commitment of financial resources and pro bono support is focused on City Year's In School & On Track program, which aims to build the nation's graduation pipeline by keeping students on track to graduate. In Texas we have stepped up our longstanding commitment to education by sharpening our focus on improving graduation rates, college access, and career readiness. One component of our local effort is the new education-focused giving option to our local United Way campaign, the United Way Education Collaborative. Pledges designated to the Collaborative will sponsor the Glen Cliff High School-Based Family Resource Center and other United Way funded education initiatives.

Deloitte's Information Management Practice

Deloitte's Information Management (IM) practice provides services that focus on one of our clients' most important assets — information. We help organizations actively manage their strategic initiatives, monitor performance and control costs and margins by empowering them with technology and processes that enable efficient management and delivery of actionable information.

Highlights of our practice include:

- Nearly 2,000 practitioners focused on information management, and over 1,500 of those are experienced in Business Intelligence and Data Warehousing
- Serving 90 of the top 100 organizations in the US
- More than 500 engagements completed over the past three years
- Recognized as a "leader" in both Gartner's North America and Global Business Intelligence/Performance Management Services Magic Quadrants
- Over 12 years of experience implementing Cognos solutions globally
- Designated as a Platinum Global Consulting Partner, which is the top partner designation with IBM Cognos
- Named Cognos Global Alliance Partner of the Year or Systems Integrator of the Year for six of the past eight years (2004-2011)

Our IM capabilities are spread across four functional areas. The following chart details each of our IM capabilities:

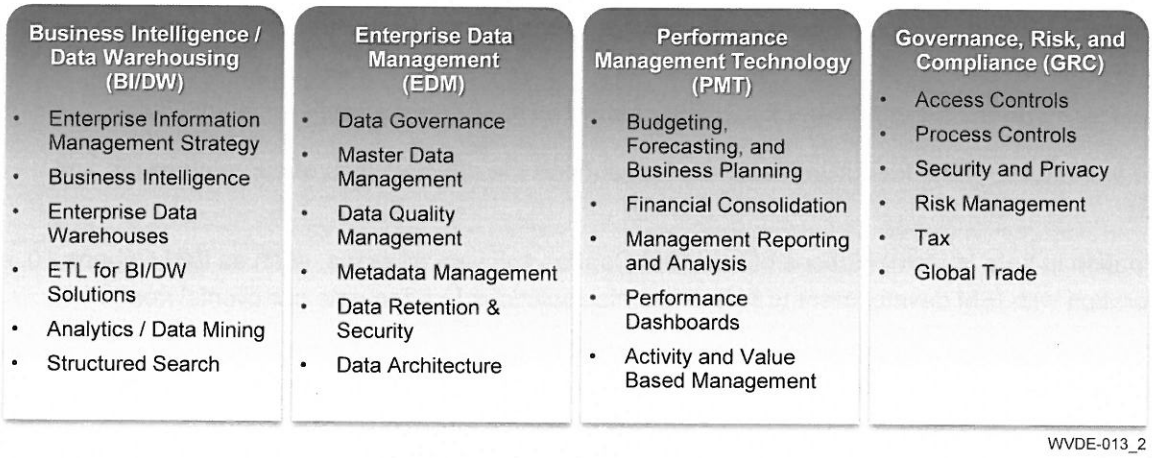
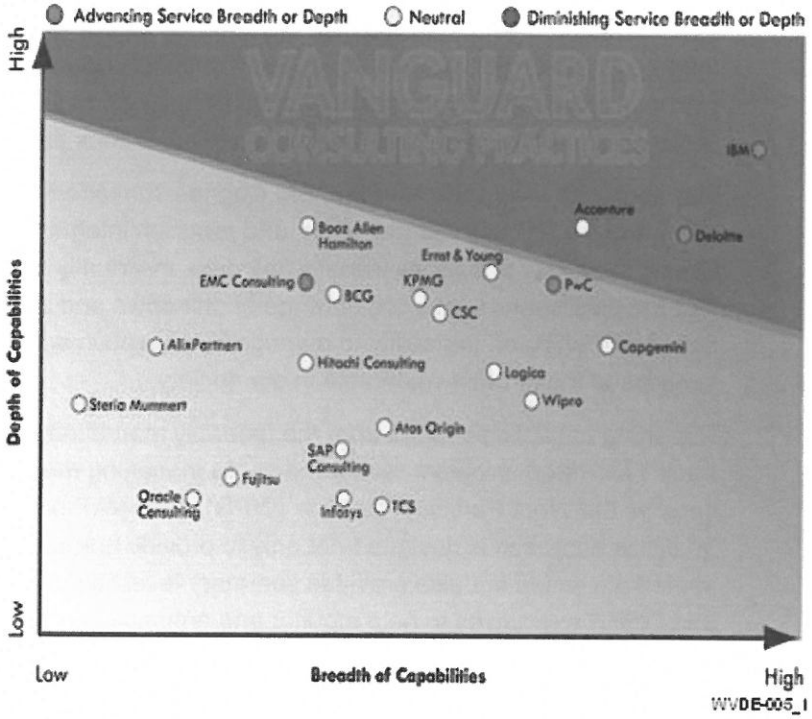


Figure 4.3-3. Deloitte's IM Capabilities.
Deloitte brings a large number of capabilities to its clients.

Kennedy Information recently completed an analysis of the global IM and Analytics consulting marketplace. Deloitte was recognized as a leader in this area and recognized as one of the "Vanguard" Consulting Practices.

> "Deloitte experienced the strongest growth rate at 16%. This impressive growth reflects the firm's ability to bring a business-led approach to the IM & analytics space and its ability to leverage its long-standing relationship with customers to help them embark on their analytics initiatives."

Source:
Kennedy Consulting Research & Advisory, Information Management & Analytics 2012-2013; ©BNA Subsidiaries, LLC. Reproduced under license.



Our Experience with IBM Cognos

Deloitte has provided services in support of more than 200 implementations for IBM Cognos software users globally, spanning industries such as consumer products, financial services, life sciences and health care, and manufacturing, as well as local, state, and federal government. Our dedicated IBM Cognos practitioners are experienced in the technology and the various phases of IBM Cognos software deployments. This level of experience, knowledge, and skills has resulted in the following distinctions:

- Recognized by IBM as Cognos Global Partner of the Year or Global Systems Integrator of the Year for five years running
- Awarded IBM's 2010 Global Alliance Excellence Award for Business Analytics
- Access to dedicated IBM executive resources that support the effectiveness of our relationship and projects
- Participation in beta implementations of new IBM Cognos software releases, such as IBM Cognos 10, and collaboration with IBM development to help customize solutions to effectuate our clients' needs

Deloitte takes a business-aligned approach to technology integration, to deliver a technology solution that not only performs and scales, but also can be widely adopted by the business and supported by IT.

Our Prior Use of IBM Cognos in West Virginia

Based on Deloitte's deep knowledge and understanding of driving issues, limitations, and complications of current systems and business processes faced by DHHR, Deloitte developed an Integrated Eligibility Analytics platform designed to align program and policy and integrate data informatics, operational guidance, and outcomes-based management approaches into day-to-day operations. With these combined capabilities, the Integrated Eligibility Analytics solution supports operations that are more efficient by drawing upon a common foundation for proactive sharing of decision support information. With this approach, DHRR can better help identify impact areas, develop interventions, and improve outcomes for their constituents.

Our approach leverages both the IBM Cognos 10 platform for reporting, dashboarding, scorecarding, predictive analytics, fraud detection, and program integrity. These analytic platforms are designed to offer DHRR the ability to explore virtually any data, in virtually any combination and over virtually any time period that the data spans with a broad range of drill-down and slice-and-dice functionality. This approach can help provide DHHR staff the ability to manage by exception and take an outcomes-based approach to providing services to those most vulnerable in our society.

Reporting capabilities range from the federally mandated reports, such as the ACF 199 and ACR 812, which track TANF work program requirements, to managing metrics that if not met, can result in federal sanctions such as the Work Participation Rate (WPR) and SNAP error rate. Following a 'bottom-up' approach, our analytics approach is designed not only to provide granular case level details for case workers to take immediate action but also provides summary-level statistics, in various formats, for supervisors, policy staff, and DHHR executives to help monitor and enhance outcomes for their constituency.

Deloitte's Public Sector Development Center (PSDC)

The PSDC was established in Camp Hill, PA in 2009 to better align Deloitte's Technology Service Area capabilities with the evolving Public Sector marketplace. Our Technology practice within the state/local sector has grown substantially over the last several years and the Public Sector market place continues to be more competitive than ever.

The purpose of this Center is to reduce delivery cost, improve quality and reduce risk by using proven processes and tools, and industry aligned/experienced practitioners. We are proposing to use the Center for our Cognos development work for WVDE.

The Center's current focus is to support systems integration, custom development and application management services engagements within the public sector industry. It supports information management capabilities for public sector projects across disciplines from inception to production.

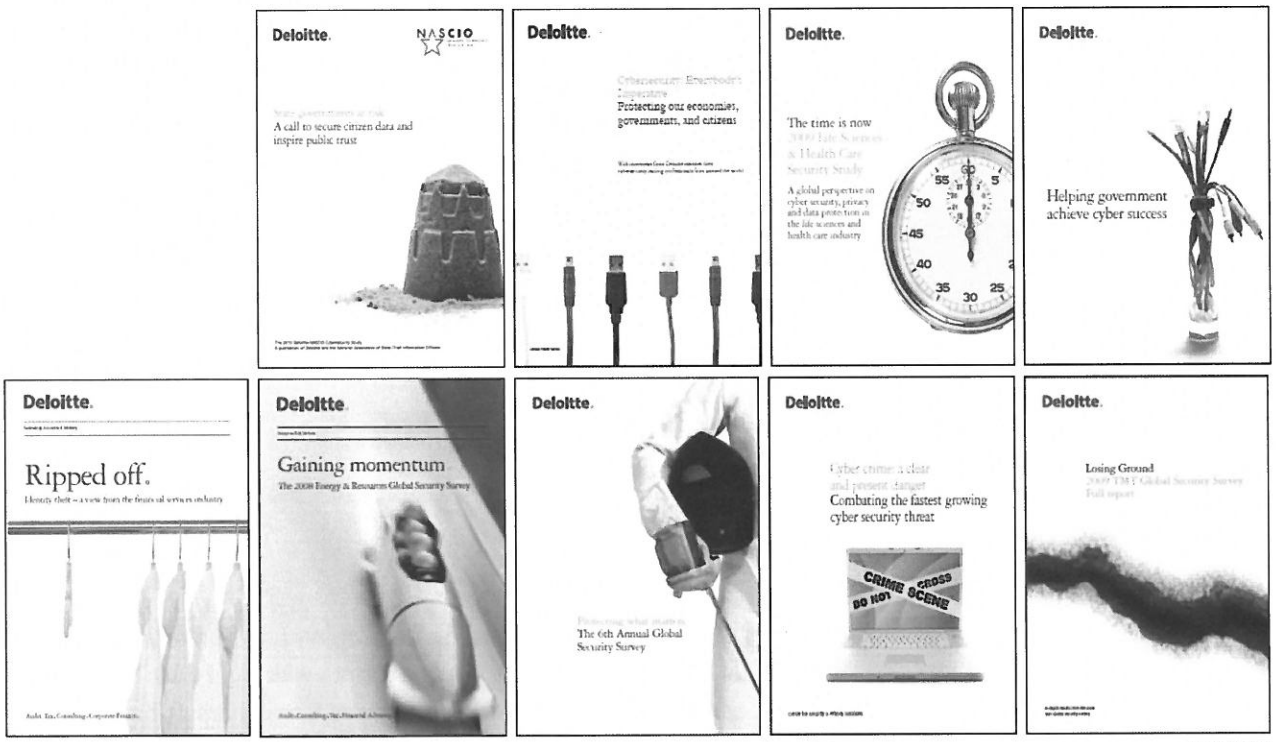
Deloitte's Security and Privacy Practice

Deloitte has a mature security and privacy practice that will bring several benefits to WVDE over the course of the engagement:

> "Deloitte's ability to execute rated the highest of all the participants."
>
> Source:
> Ed Ferrara and Andrew Rose
>
> Forrester Wave™: Information Security and Risk Consulting, Q1 2013

- **Knowledge of how state agencies work**. We are the only security consulting firm with a national state sector security practice. Our practice has demonstrated our state government knowledge through the publication of the biennial Deloitte National Association of State Chief Information Officers (NASCIO) Cybersecurity Study publications in 2010 and 2012 — highlighting the challenges states face and approaches for overcoming them.
- **Executable advice**. Our technical approach and advice is based on our implementation experience. While we performed 117 security assessments in 2012, we also assisted our clients with over 300 implementations of security tools and processes. "Executable advice" comes from years of hands-on experience deploying security programs that not only include remediating vulnerabilities, but also implementing the people, process, and technology aspects necessary to support the initiative.
- **Deloitte has one of the largest security and privacy practices**. We have over 2,000 CISA (Certified Information Systems Auditor), 1,100 CISSP (Certified Information Systems Security Professional), about 120 Certified Information Privacy Professional (CIPP) and 150 CISM (Certified Information Security Manager) professionals – a large pool of qualified specialists to serve you.

We continually monitor the evolving marketplace trends and, through our Center for Security & Privacy Solutions, we integrate new, emerging services into our portfolios, enabling us to remain in the forefront of security and privacy capabilities. We are committed to valuable research and interactive forums for knowledge sharing as demonstrated by our numerous research publications, as shown the following figure.



WVDE-030

Figure 4.3-4. Deloitte's Commitment to Thought Leadership.
Deloitte builds eminence in the marketplace through research publications and point-of-views, available at www.deloitte.com

In addition to these Deloitte publications, Deloitte teamed with the National Association of State Chief Information Officers (NASCIO) to conduct a national cyber security survey - with 49 of the 50 states participating. NASCIO published this survey report in September 2010 titled **State governments at risk - A call to secure citizen data and inspire public trust** (http://www.nascio.org/publications/documents/Deloitte-NASCIOCybersecurityStudy2010.PDF)

About eScholar

eScholar was established in 1997 to focus exclusively on providing data warehousing and associated solutions to the education market. Over the years, eScholar has worked with numerous SEAs and LEAs across the country to successfully implement education data management solutions including district level data warehouses, statewide PK-12 data warehouses/state longitudinal data systems as well as broader implementations encompassing P-20 and more. The eScholar CDW solution is the most complete solution available for compiling, analyzing, and reporting on the many thousands of data elements of education data.

eScholar's eight SLDS implementations are shown in the map below. Note that four of these were joint projects with Deloitte.

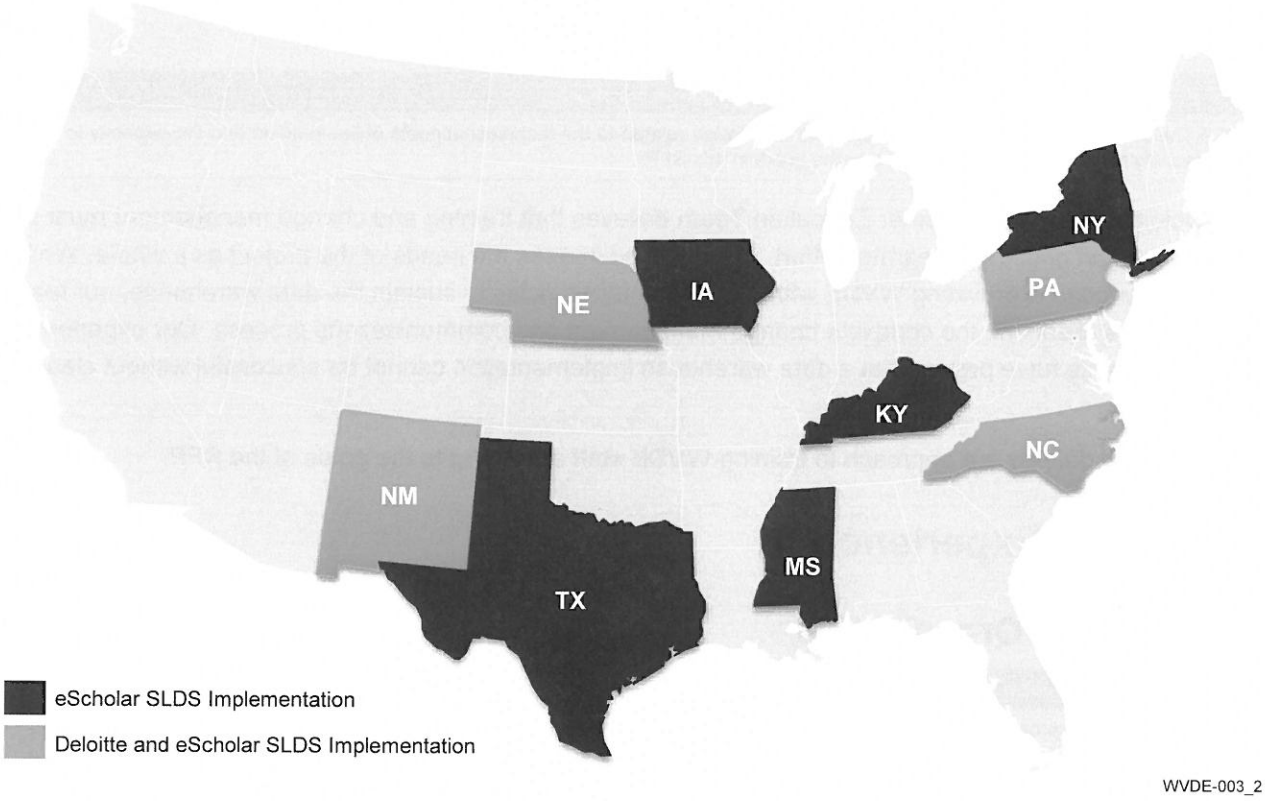


Figure 4.3-5. eScholar's SLDS Implementation Experience.
eScholar has SLDS experience in nine states, four of which were joint projects with Deloitte.

In addition to the CDW, eScholar's related product for assigning unique and consistent state-level student ID's (eScholar Uniq-ID® for Students) has been implemented by Office of the State Superintendent of Education for the District of Columbia, Iowa, Georgia, Kansas, Missouri, North Carolina, New Mexico, Pennsylvania and Texas . This system is also being used nationally by the United States Department of Education's Migrant Student Information Exchange and globally by the Department of Defense Education Activity. eScholar's staff identifier system, eScholar Uniq-ID for Staff, was chosen by Kansas Department of Education and North Carolina Department of Public Instruction to assign identifiers to their staff without the use of social security numbers.

4.3.1.f List of Contracts

RFP Reference: Section 4.3. Qualifications and Experience, page, 25

4.3.1 The Vendor's proposal must consist of a detailed narrative that describes its company, including but not limited to

- 4.3.1.f. A list of contracts the Vendor has had during the last five (5) years that relate to the Vendor' s ability to perform the services needed under this RFP. List contract reference numbers, contract period of performance, contact persons, telephone numbers, and fax numbers/e-mail addresses. Include a brief summary of each project' s goal, deliverables , milestone events, etc., and the role of the Vendor in accomplishing such items.

The Deloitte/eScholar team has completed three contracts over the last five years that are similar in size and scope. These contracts are highlighted as references in *Section 4.3.5.* Included in each reference are contract durations, client contacts including phone and email addresses, and a brief narrative describing the project, its goals, and the scope of services our team was responsible for providing.

4.3.2 Document Knowledge

RFP Reference: Section 4.3. Qualifications and Experience, page, 25

4.3.2 The successful Vendor must document its knowledge related to the technical aspects of the solution and the capacity to successfully train WVDE staff according to the goals in this RFP.

The Deloitte/eScholar Customer Education Team believes that training and change management must be delivered as an ongoing, integrated effort. Our team addresses the needs of the project as a whole. While the primary focus is providing WVDE with the core competencies to sustain the data warehouse, our team also mentors clients on the complete change management and communications process. Our experiences with prior clients have proven that a data warehouse implementation cannot be successful without clearly defined roles.

Section 4.4.4 defines our approach to training WVDE staff according to the goals of the RFP.

4.3.3 Staff Experience

4.3.3.a Team Organization

RFP Reference: Section 4.3. Qualifications and Experience, page, 25

4.3.3 The Vendor's proposal must also consist of narrative that describes, in detail , the Vendor's:

- 4.3 .3.a. Experience of staff (list qualifications, educational background , certifications, etc.) who will be assigned to this project, including key subcontractors when applicable.

In this section we present the highly qualified individuals who will be part of our project team. Each team member has extensive experience in their role on projects of similar size and scope. Furthermore, the core members of our team that will be delivering our solution have experience working with other SEAs to implement SLDS projects. Our team's education experience will aid our aggressive timeline for this project. The following table highlights some of the key features and benefits our mix of staff brings to WVDE:

Features	Benefits
Numerous successful SLDS implementations	The members of our team have been in key positions on and responsible for delivering numerous successful SLDS projects at SEAs across the country. This experience will determine WVDE enjoys similar success.
Extensive national education experience	Our team understands the education domain from local, state and national perspectives and the analytical methods that can provide true insight to student data.
Experienced leaders in information management	Our team brings years of public sector data warehouse experience and industry practice knowledge to the project.

Figure 4.3-6. Our Staff's Experience Features and Benefits.
Our team has the right mixture of experience to deliver for WVDE.

The following chart details the project management structure of the Deloitte/eScholar team. Key personnel that are committed to perform the assigned work are indicated with a key icon.

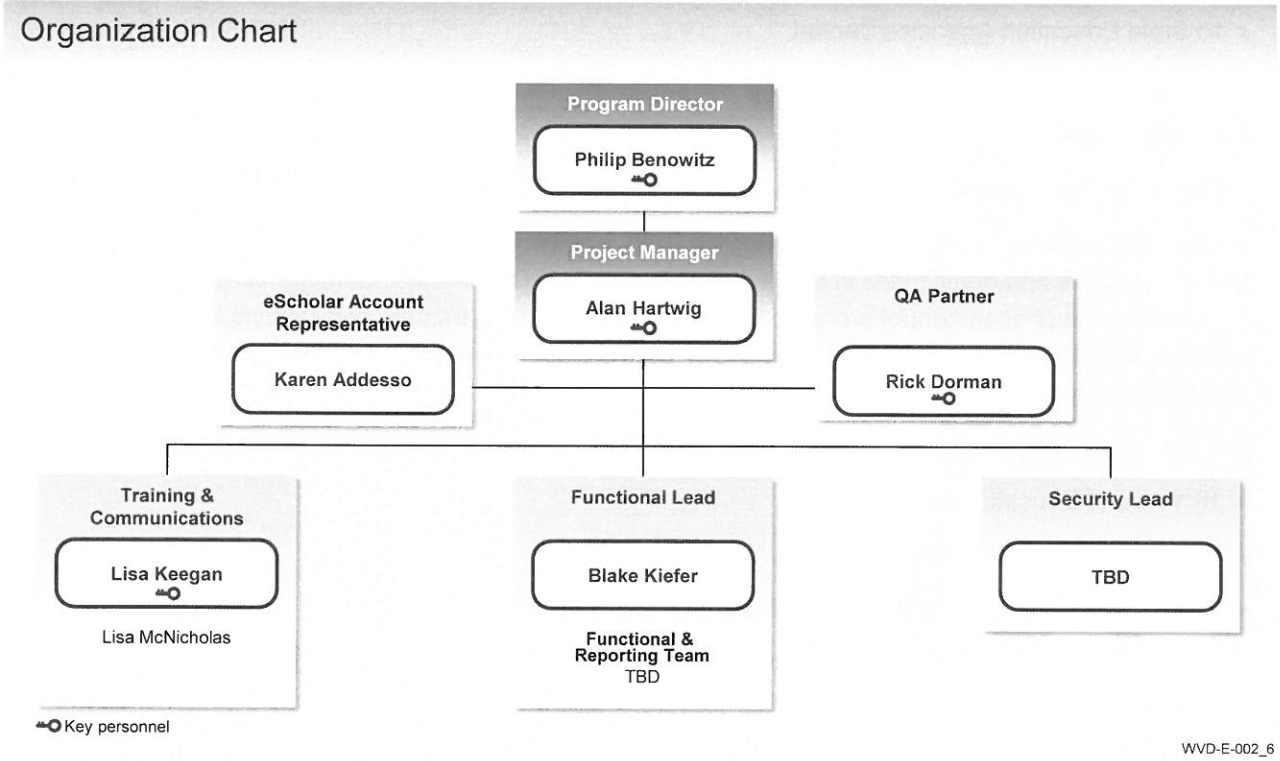


Figure 4.3-7.Organized for Success.
Our project team has staff with the right mix of experience.

4.3.3.b -4.3.3.c Staff Experience Summary

RFP Reference: Section 4.3. Qualifications and Experience, page, 25

4.3.3 The Vendor's proposal must also consist of narrative that describes, in detail , the Vendor's:

- 4.3.3.b. The amount of time (FTE allocated to the project) each staff is to be assigned to the project.
- 4.3.3.c. Experience of staff in completing similar projects . Include specifics regarding the data model, reporting, analytics, and any other key deliverables/ components/aspects of the projects.

Our team's leadership, management, and functional teams have a wealth of relevant experience in the public sector, serving SEAs, the eScholar SLDS data model, and business intelligence. Below is a description of the different roles select team members will fill, and their relevant experience to the role. Included in the description of their role is their expected FTE during their time on the project.

A detailed project history for each staff member, including specific roles and responsibilities, can be found in their resumes included in *Section 4.3.4*.

Project Director - Philip Benowitz, Deloitte, .25 FTE. The Project Director has overall responsibility for the delivery of the scope of services described in this proposal, and is ultimately responsible for project quality and success. The Project Director participates in steering committee meetings and works with WVDE management to address project issues and risks. The Project Director has the authority to assign staff and resources as necessary to support the project. Philip's relevant experience includes:

- 10 State Education Agencies Served
- 23 Years of Education Experience
- 4 eScholar SLDS Implementations
- 8 Years of Public Sector Business Intelligence Experience

Project Manager - Alan Hartwig, Deloitte, 1.0 FTE. The Project Manager manages the daily activities of the project team and participates in key deliverable activities. The Project Manager is responsible for establishing the change control process, meeting deliverable time frames, participating in team deliverable creation, managing communications, and overseeing change management activities of internal and external team members. Alan's relevant experience includes:

- 7 State Education Agencies Served
- 18 Years of Education Experience
- 4 eScholar SLDS Implementations
- 15 Years of Public Sector Business Intelligence Experience

Functional Lead - Blake Kiefer, Deloitte, 1.0 FTE. The Functional Lead manages the overall design, development, testing and implementation of the solution. This includes technical activities such as working with WVDE to configure the solution appropriately. It also includes functional activities such as working with the Project Manager and Functional & Reporting Team to gather requirements, define eScholar data integration templates and define business rules, and develop reports. Blake's relevant experience includes:

- 5 State Education Agencies Served
- 6 Years of Education Experience
- 3 eScholar SLDS Implementations
- 6 Years of Public Sector Business Intelligence Experience

Training & Communication Lead – Lisa Keegan, Deloitte, 1.0 FTE. The Training and Communication Lead develops training materials and delivers training through the use of instructor led training sessions and webinars. They are also responsible for managing project communications with an emphasis on communications and messaging to stakeholders and LEAs. Lisa's relevant experience includes:

- 15 Years of Instructional Design Experience
- 3 Years of Technology Adoption Projects
- 3 Years of Organizational Change Management Projects
- 1 eScholar SLDS Implementation

Training & Communication Team – Lisa McNicholas, eScholar, 0.25 FTE. The Training and Communication team members assist the Training & Communication Lead in developing training materials and delivering training through the use of instructor led training sessions and webinars. Lisa's relevant experience includes:

- 5 State Education Agencies Served

- 11 Years of Education Experience
- 7 Years Technical Training and Professional Development Experience

4.3.4 Key Project Staff Resumes

RFP Reference: Section 4.3. Qualifications and Experience, page, 25

4.3.4 The vendor should provide resumes for the key project staff, which include information on the individual 's particular skills related to this project, education, experience, significant accomplishments, and any other pertinent information. The Vendor must commit that staff identified in its proposal to actually perform the assigned work. Any staff substitution should have comparable experience and qualifications, and has to have prior approval by the WVDE.

This section provides the resume for our proposed team. Key personnel that are committed to perform the assigned work have a key icon next to their name.

Philip Benowitz

Proposed Role: Project Director

- Phil is a Leader of Deloitte's State Education consulting practice. He is based in Parsippany and has over 24 years of experience in delivering, managing and coordinating the implementation activities of information systems. He served as a project director for four COTS SLDS implementations. He is currently working with the Pennsylvania Information Management Systems on a Statewide Longitudinal Data System to track student and teacher performance. He regularly attends and presents at several state government conferences on a variety of topics.

Total Years of Relevant Experience:	**25 Years**
Relevant Experience	**Pennsylvania Information Management System (PIMS) (03/07 - Present)** Project Director for Implementing eScholar Data Manager versions 1.0-5.0 and CDW versions 9.0-12.0 for PK-12 and Postsecondary **Responsibilities:** • Led development and implementation of enhancements such as broader PK-12 data collections, broader SEA and LEA reporting and expansion to the postsecondary sector. Managed, prioritized and coordinated the project activities. Directly responsible for deliverables including those of subcontractors. **District of Columbia Office of the State Superintendent of Education Unique Student Identifier (USI) (02/11 – 05/11)** • Managing Director for OSSE implementation of eScholar Uniq-ID for Students **Responsibilities:** • Directed testing and pilot activities .Served as an advisor for the project, overseeing overall project activities. **North Carolina Common Education Data Analysis and Reporting System (CEDARS) (09/09 to 07/11)** Project Director for eScholar Data Manager™ v5.0 , CDW-PK-12 v11.0 and Oracle Business Intelligence Enterprise Edition Plus Implementation **Responsibilities:** • Managed, prioritized and coordinated the project activities. Directly responsible for deliverables including those of subcontractors.

Philip Benowitz

Proposed Role: Project Director

New Mexico Student Teacher Accountability and Reporting System (STARS) (08/05 to 10/10)

Project Director for eScholar Uniq-ID v 5.0, WorkFlow Manager v 2.0, and CDW v 8.0 Implementation

Responsibilities:

- Managed, prioritized and coordinated the project activities. Directly responsible for deliverables including those of subcontractors. Played a key role in Development of statewide education portal proof-of-concept

Nebraska Student Staffing Recording System (NSSRS) (12/04 to 11/06)

Project Director for the Statewide implementation of eScholar Uniq-ID.

Responsibilities:

- Managed, prioritized and coordinated the project activities. Directly responsible for deliverables including those of subcontractors.

Education

- Carnegie Mellon University, Master of Science, Public Management and Policy
- Carnegie Mellon University, Bachelor of Science, Public Policy and Management

Alan Hartwig

Proposed Role: Project Manager

Alan is a Specialist Leader in Deloitte's State Government practice specializing in education. He is based in Minneapolis and has over 25 years of experience in the implementation of information systems. He is currently working with the Texas Education Agency on a Statewide Longitudinal Data System to track student and teacher performance. He regularly attends and presents at several national education conferences on a variety of topics.

Total Years of Relevant Experience:	**25 Years**
Relevant Experience	

Pennsylvania Department of Education

The Pennsylvania Department of Education is responsible for K-12 Education in the Commonwealth.

Deloitte Consulting was selected as the prime contractor by the Pennsylvania Department of Education to design, develop and implement High School and Community College Feedback Reporting. The project provided reports to high schools and community colleges on the performance of their students in postsecondary institutions.

Responsibilities:

- Alan served as the day-to-day project manager and had responsibility for deliverables including those of the subcontractors.

North Caroline Department of Public Instruction

The North Carolina Department of Public Instruction is responsible for K-12 Education in the state.

Deloitte Consulting was selected as the prime contractor by the North Carolina Department of Public Instruction to implement a longitudinal data system (data warehouse). The system provides longitudinal data for students and staff at North Carolina public schools. Deloitte partnered with eScholar for this important project.

Responsibilities:

- Alan served as the day-to-day project manager and had responsibility for deliverables including those of the subcontractors.

North Caroline Department of Public Instruction

The North Carolina Department of Public Instruction is responsible for K-12 Education in the state.

Deloitte Consulting was selected as the prime contractor by the North Carolina Department of Public Instruction to design, develop and implement systems to assign unique identifiers to students and educators. The system assigned unique identifiers to over 1.8 million students and staff. Deloitte partnered with eScholar for this important project.

Responsibilities:

- Alan served as the day-to-day project manager and had responsibility for deliverables including those of the subcontractors.

South Dakota Department of Education

The South Dakota Department of Education (SD DOE) is responsible for K-12 Education in the state.

Deloitte Consulting was selected to assist the SD DOE in the development of a Longitudinal Data System plan including a Data Study and the development of an enterprise data dictionary.

Responsibilities:

- Alan served as the day-to-day project manager and had responsibility for deliverables.

Pennsylvania Department of Education

The Pennsylvania Department of Education is responsible for K-12 Education in the Commonwealth.

Deloitte Consulting was selected as the prime contractor by the Pennsylvania Department of Education to design, develop and implement the Pennsylvania Information Management System (PIMS). The system includes a data warehouse to manage student and staff related data. Deloitte has been selected to expand the PIMS data warehouse to support Postsecondary education. Deloitte partnered with

Alan Hartwig

Proposed Role: Project Manager

eScholar for this important project.

Responsibilities:

- Alan served as the day-to-day project manager and had responsibility for deliverables including those of the subcontractors.

New Mexico Public Education Department

The New Mexico Public Education Department is responsible for K-12 Education.

Deloitte Consulting was selected as the prime contractor by the New Mexico Public Education Department (PED) to design, develop and implement the Student Accountability and Reporting System. The system includes a data warehouse to manage student and staff related data. Deloitte partnered with eScholar for this important project.

Responsibilities:

- Alan served as the day-to-day project manager and had responsibility for deliverables including those of the subcontractors.

Nebraska Department of Education

The Nebraska Department of Education is responsible for K-12 Education.

Deloitte Consulting was selected as the prime contractor by the Nebraska Department of Education to design, develop and implement the Nebraska Student and Staff Records System. The system consisted of a system to assign and manage unique student identifiers for students in Nebraska and a data warehouse to manage student and staff related data. Deloitte partnered with three other firms for this important project.

Responsibilities:

- Alan served as the day-to-day project manager and had responsibility for deliverables including those of the subcontractors.

Education

- Bachelor of Science – Computer Science
  - University of South Dakota
- Master of Public Management
  - Carnegie Mellon University

Training and Certifications

- Certified Project Management Professional

Rick Dorman

Proposed Role: QA Partner

Rick Dorman is a Principal in Deloitte Consulting LLP's State Government Practice with 27 years of Information Technology Consulting Experience including 23 years of State Government experience. Rick leads Deloitte's Consulting efforts at the State of West Virginia and has led successful projects serving West Virginia since 1994 including the RAPIDS and FACTS projects for the Department of Health and Human Resources. Rick has led and overseen more than 25 successful projects across 17 states. He has direct experience in Health & Human Services, Unemployment Insurance Tax & Benefits, Workers Compensation, Medicaid, Disability Insurance, Technology Outsourcing and Tax and Revenue.

In addition, Rick is a Senior Technology Principal responsible for State Government Technology Delivery Quality, nationally. He has lectured and presented on various technology management topics to NASCIO, The American Public Human Services Association and Carnegie Mellon University.

Total Years of Relevant Experience:	**18 Years**
Relevant Experience	**Louisiana Department of Children and Family Services (4/2011-Present)** **QA Partner - Common Access Front End (CAFÉ) Project** CAFÉ is a comprehensive, fully integrated common access front end (CAFÉ) including integrated business case management functionality for DCFS programs. Those programs include Family Independence Temporary Assistance Program (FITAP), Kinship Care Subsidy Program (KCSP), Child Care Assistance Program (CCAP), Supplemental Nutrition Assistance Program (SNAP), Disaster Supplemental Nutrition Assistance Program (DSNAP), Child Welfare, Child Support Enforcement (SES) and other minor programs. **Responsibilities:** As QA Executive, Rick ensures content and structure of Testing documents/artifacts is documented and maintained. He implements, monitors, and enforces processes for testing as per standards defined by the organization. Rick tracks the report of testing activities like test testing results, test case coverage, required resources, defects discovered and their status, performance baselines etc. In addition, he ensures the timely delivery of different testing milestones. **West Virginia Department of Health and Human Resources (10/1994 – Present)** **Project Manager; Engagement Partner - Recipient Automated Payment and Information Data System (RAPIDS) Project** RAPIDS project supports TANF, Food Stamps, Medicaid, CHIP, Refugee Assistance, and several state administered programs of assistance. **Responsibilities:** As Project Manager/Engagement Partner, Rick is currently leading a significant technology modernization effort that includes inROADS - a Web-based application for client self-service functions using Deloitte's FAST4J J2EE framework designed to support self-service applications over the Internet for Medicaid for Children and Pregnant Women, Children's' Health Insurance Program (CHIP), and Food Stamps; RAPIDS Web - an effort to transform RAPIDS from a mainframe only system to a Web-based J2EE environment using Deloitte's FAST4J J2EE framework; and RAFT - a Cognos data mart designed to provide enhanced state and federal reporting capabilities and drill down functionality to assist DHHR in making policy changing decisions. Rick managed the successful development and implementation of RAPIDS in 1996 and acted as the primary liaison between the client and Deloitte and was responsible for the on time and within budget delivery of the project through the statewide implementation phase. Managed project scope and timeframes, project staffing and budgeting, planning for and tracking of project milestones and deliverables, system architecture decisions, and obtaining the appropriate resources to complete each phase of the project. Responsible for strategic planning, risk assessment and mitigation, and providing support to Deloitte's day-to-day project management to meet the project's contractual and operational needs.

Rick Dorman

Proposed Role: QA Partner

Texas Health and Human Services Commission (5/2001 – 8/2004)

Project Manager; Engagement Partner - Texas Integrated Eligibility Redesign System (TIERS)

Deloitte was responsible for project management and managing the design, development, implementation, and training for Texas' new automated public assistance system, TIERS. The project employed Object Oriented Application Development techniques and the Rational Unified Process for design.

Responsibilities:

As Project Manager/Engagement Partner, Rick was primary liaison between the client and Deloitte. Responsible for successful completion of the project including contract management, project change management and timeframes, project staffing and budgeting, issue resolution, planning for and tracking of project milestones and deliverables, and system architecture decisions.

West Virginia Department of Health and Human Resources (10/1996 – 10/1999)

Engagement Manager

FACTS represents West Virginia's first statewide child welfare information system and follows Statewide Automated Child Welfare Information System (SACWIS) guidelines set by the Agency for Children and Families (ACF). FACTS provides the State of West Virginia with the ability to record and track children who are abused, neglected, receiving child welfare services, or in the process of being adopted, as well as automating payment processes and generating federally mandated reports. Deloitte was the prime contractor for West Virginia FACTS, responsible for design, development, implementation, and training, as well as for establishing the new technical architecture for FACTS consisting of PowerBuilder clients, Novell Netware 4.0 Oracle LAN servers, and a central HPUX based Oracle server.

Responsibilities:

As Engagement Manager, Rick was accountable to the West Virginia Secretary of Health and Human Resources, the DHHR Director of MIS, and the FACTS Steering Committee for the successful completion of the project. Supported the Deloitte Project Manager in securing the necessary and appropriate resources available to complete the designated project tasks, which resulted in a statewide implementation on time and within budget. Oversaw the successful transition of system responsibilities to the client staff in October 1999.

Education

Bachelor of Arts, with a concentration in
Computer Science/Business Administration

- Augustana College, Rock Island, IL

Lisa Keegan

Proposed Role: Training & Communications Lead

Lisa is a Manager in Deloitte's Human Capital practice and offers fifteen years of experience in the development and implementation of comprehensive learning solutions and communication strategies to support technology adoption projects across both public and commercial sectors. Lisa's learning solutions experience includes designing blended learning programs, including eLearning modules, virtual learning sessions, and certification programs. Lisa has a strong training delivery and managerial background as well as project management skills in global and statewide training deployments.

Total Years of Relevant Experience:	**15 Years**
Relevant Experience	

Colorado Department of Education (4/2013 – 08/2013)

Training and Strategic Communications Lead

- Created the strategic leadership communication strategy and stakeholder engagement plans for the project's Executive Team, including communications for the CIO.
- Developed communication materials, conducted a stakeholder analysis and change impact analysis.
- Developed the learning strategy and solution design.
- Led the agency's internal team to develop 7 Web-based training using rapid eLearning tools.

Texas Education Agency (2/2013 – 06/2013)

Training Lead

- Developed the learning solution and training materials for the organization's tech adoption project for data collection and student dashboards.
- Managed a training team (1 Senior Consultant and 2 eScholar Subcontractors).
- Developed 15 Instructor-Led training programs to be delivered statewide by the Educational Service Centers (ESCs).
- Developed an ESC Train-the-Trainer program to assist with training delivery and tool adoption for ESCs to train the Texas school districts.
- Created the knowledge transfer plan and training deployment plan.

Technology, Media, & Telecommunications Industry (12/2012 – 01/2012)

Training Lead

- Developed the learning strategy and solution design for the organization's tech adoption project.
- Created the communication strategy and stakeholder engagement plans.
- Conducted stakeholder analysis and change impact assessment.

Oil and Gas Industry (10/2012 – 12/2012)

Consulting Lead

Built a sustainable workforce planning process and strategy to be effectively utilized across the IT function.

Determined the workforce gaps for critical roles and recommended gap mitigation solutions.

Identified trends and prioritized leading key performance indicators that translated into business relevant conclusions applicable to gap closure plans, including sourcing strategies.

Supported IT HR's Strategic Workforce Planning (SWP) review and strategy presentation.

Technology, Media, & Telecommunications Industry (5/2012 – 10/2012)

Training Lead

- Project managed and led the learning solution design for the organization's tech adoption project.
- Managed a training team (2 on-site and 1 USI resources).

Lisa Keegan

Proposed Role: Training & Communications Lead

- Developed six online training programs using Articulate and 5 virtual WebEx training sessions.
- Managed the organization's change agent network.
- Implemented a SME Train-the-Trainer program to assist with training delivery and tool adoption.
- Involved in the change strategy, stakeholder analysis and engagement plans.
- Assisted with change impact assessments and role-mapping activities.
- Developed communication emails and feedback surveys.
- Analyzed and measured training results and employee readiness.

Healthcare/Life Sciences (9/2010 – 4/2012)

Global Learning & Development Manager

- Led the global implementation of an internal learning management system across business units. Defined and implemented a global training process, training procedures, and logistics to meet FDA 21 CFR Part 820 requirements.

Off-shoring/Outsourcing, Shanghai, China (7/2009 – 4/2010)

Learning & Development Consultant

- Provided consultative guidance, learning project management services, and innovative organization development solutions supporting outsourcing buyer and vendor operations in Asia.

Off-shoring/Outsourcing, Shanghai, China (10/2007 – 7/2009)

Head of Learning and Development

- Aligned key organization goals and training programs to enhance employee skill, reduce learning curve, and retain talent for a midsized outsourcing company with 700 staff.

Technology, Media, & Telecommunications, Bangkok, Thailand (09/2003 – 09/2007)

Learning Development Manager/interim Global Head of Learning, Software Development

- Led global organization development for high-profile software transformation off-shoring projects and led the start-up and establishment of the organization's Learning Group at their new development center.

Technology, Media, & Telecommunications, Singapore (11/2000 – 09/2003)

Regional Learning Consultant

- Led technical leadership and training efforts for engineers across Asia to support and install real-time Financial Systems and Market Data Feeds.

Technology, Media, & Telecommunications, London, United Kingdom (04/1998 – 11/2000)

Regional Learning Consultant

- Led technical leadership and training efforts for engineers across Europe to support and install real-time Financial Systems and Market Data Feeds.

Lisa Keegan	Proposed Role: Training & Communications Lead
Education	

- Bachelor of Arts, University of Colorado - Boulder

Blake Kiefer

Proposed Role: Functional Lead

Blake Kiefer is a Senior Consultant in Deloitte's Information Management practice with more than 6 years of experience implementing technology solutions across five different State Education Agencies (SEAs). Blake has experience with the phases of the Software Development Life cycle (SDLC) in COTS and custom statewide data warehouses, business intelligence, and dashboard solutions. He has worked with a variety of technologies including Oracle Databases and Business Intelligence, Cognos Business Intelligence, and COTS products such as eScholar's Uniq-ID and Complete Data Warehouse.

Total Years of Relevant Experience:	**6 Years**
Relevant Experience	

Colorado Department of Education (1/2012-6/2013)

Functional Lead

- Led JAD sessions to design a data capture (custom development) and reporting tool (Cognos 10) to feed the Colorado Department of Education's (CDE) SLDS and handle state and Federal reporting needs.
- Managed a team of on-shore and off-shore resources through functional requirements gathering, functional design, testing, and report development.
- Designed integration solutions with outside systems, include CDE's student and staff identification systems.
- Responsible for functional deliverables.

Pennsylvania Department of Education (6/2011 – 12/2011)

Master Data Management Lead

- Managed a team that gathered metadata on the data stored within systems used by the Pennsylvania Department of Education (PDE).
- Interviewed key client staff on the functionality and use of IT systems at PDE.

District of Columbia Office of the State Superintendent (1/2011 – 5/2011)

Uniq-ID Testing Lead

- Led the functional testing of eScholar Uniq-ID for Students product.

North Carolina Department of Public Instruction (4/2009 – 7/2011)

Uniq-ID Analyst

- Communicated extract requirements to school districts and helped the districts test their data extracts.
- Configured eScholar's Uniq-ID solution to meet NC Departments of Public Instruction's (DPI) needs.
- Trained school district staff on Uniq-ID for Students and Staff.
- Executed test scripts against the Uniq-ID implementation.

SLDS Analyst

- Gathered functional requirements from key stakeholders at DPI.
- Created load template specifications for the SLDS.
- Managed and developed DPI's Oracle Business Intelligence Enterprise Edition (OBIEE) environment.
- Trained DPI business owners on functional reporting in OBIEE.
- Trained DPI technical staff on OBIEE administration.

Blake Kiefer

Proposed Role: Functional Lead

Pennsylvania Department of Education (4/2008 – 3/2009)

Postsecondary Functional Analyst

- Gathered requirements to expand PDE's SLDS to institutes of higher education (IHE).
- Worked with IHE's to test Uniq-ID extracts.
- Trained IHE staff on eScholar Uniq-ID for Students.

New Mexico Department of Public Education (8/2007 – 4/2008)

Report Developer

- Developed functional reports in Cognos.

Education

- Bachelor of Science in Information Sciences and Technology, The Pennsylvania State University

Lisa McNicholas

Proposed Role: Training & Communications Team

Lisa McNicholas is the Manager of Customer Education at eScholar. Lisa owns a deep understanding of teaching and learning through her experiences in professional development. She has had the opportunity to engage the national education community at various levels, but the focus has remained the same: create learning experiences that build human resource capacity to deliver results. Each role has afforded her new insights into curriculum development, instructional practices, the integration of technology into the learning process and the metrics used to evaluate the effectiveness of programs. At a different tier, her work with district and state level administrators has allowed for perspective on organizational strategies and policies and how this ties into professional development goals.

Total Years of Relevant Experience:	**3.5 Years**
Relevant Experience	

Mississippi Department of Education

Customer Education and Change Management Manager

- Responsible for strategic planning and development of training and change management plan
- Project management for training and professional development implementation
- Development and delivery of technical training materials on eScholar Data Manager and the eScholar CDW
- Development and delivery of end user dashboard report professional development materials
- Ongoing support via remote learning and eScholar U™ Web-based learning materials

Texas Education Agency

Training Manager, Unique ID Implementation

- Responsible for strategic planning and development of training and change management plan
- Project management for training implementation for statewide rollout using the TTT method
- Development and delivery of technical training materials on eScholar Unique ID

Texas Education Agency

Training Lead, Technical and studentGPS training and professional

- eScholar Lead for the development and delivery of technical training in collaboration with the Deloitte training team
- Collaborated on development and delivery of the studentGPS Dashboard training materials with the Deloitte training team

Pennsylvania Department of Education

Training Manager, Data Quality Engine

- Responsible for strategic planning and development of training and change management plan
- Project management for training implementation for the statewide rollout
- Development and delivery of technical training materials on the eScholar Data Quality Engine

Santa Ana Unified School District, CA

Training Manager, Early Warning System Implementation

- Responsible for strategic planning and development of training and change management plan
- Project management for training and professional development implementation
- Development and delivery of technical training materials on eScholar Data Manager and the eScholar CDW
- Development and delivery of Early Warning System professional development materials directly to SAUSD administrators, guidance counselors and educators
- Ongoing support via remote learning and eScholar U™ Web-based learning materials

Lisa McNicholas

Proposed Role: Training & Communications Team

Cumberland County Schools, NC

Training Manager, myTrack Pilot

- Responsible for strategic planning and development of training and change management plan
- Project management for training and professional development implementation
- Development and delivery of myTrack professional development materials directly to Cumberland County administrators, guidance counselors and educators
- Ongoing support via remote learning and eScholar U™ Web-based learning materials

New York State Education Department

Training Manager, eDM Implementation

- Project management for training and professional development implementation
- Development and delivery of technical training materials on eScholar Data Manager and the eScholar CDW

Office of the State Superintendent of Education for the District of Columbia

Training Lead, Unique ID Implementation

- Development and delivery of technical training materials on eScholar Unique ID

Prince George's County, MD

Training Manager and Support

- Development and delivery of technical training materials on eScholar Data Manager and the eScholar CDW
- Ongoing support via remote learning and eScholar U™ Web-based learning materials

Nebraska DOE

Training Manager and Support

- Development and delivery of technical training materials on eScholar Data Manager and the eScholar CDW
- Ongoing support via remote learning and eScholar U™ Web-based learning materials

Fort Wayne, IN;

Training Manager and Support

- Development and delivery of technical training materials on eScholar Data Manager and the eScholar CDW
- Ongoing support via remote learning and eScholar U™ Web-based learning materials

New Mexico PED

Training Manager and Support

- Development and delivery of technical training materials on eScholar Data Manager and the eScholar CDW
- Ongoing support via remote learning and eScholar U™ Web-based learning materials

Previous positions:

Meizner, Inc., Pelham, NY

- Sales and Implementation of curriculum-based software, NJ State Lead

CompassLearning, Austin TX

- Educational Consultant, Northeast Region

Holdrum Middle School, River Vale, NJ

- 6th and 7th Grade Teacher of Language Art, French and Spanish

Washington Academy, Cedar Groves, NJ

- Kindergarten Teacher of self-contained ED students

Lisa McNicholas	**Proposed Role: Training & Communications Team**
Education	

- **New York University,** New York, NY. Bachelor of Arts, Romance Languages. 1999.
- NJ Department of Education Provisional Teacher Program, **Ramapo College**. 200 hours. 2002.
- **Fairleigh Dickinson University**, Teaneck, NJ. Certificate of Human Resources & Certificate of Administrative Sciences. 2009.
- **Fairleigh Dickinson University,** Teaneck, NJ. Masters of Administrative Sciences. 2010.

Karen Addesso

Proposed Role: eScholar Account Representative

Karen Addesso is a Senior Project Manager with eScholar's Client Services team. Karen's clients comprise federal, state and local education agencies, both at the PK-12 and postsecondary level. She supports multiple product implementations, including eScholar's Uniq-ID, eScholar Interstate ID eXchange, and the eScholar Complete Data Warehouse. Karen's key projects at the state level include the North Carolina Department of Public Instruction, the Iowa Department of Education and the Nebraska Department of Education.

Prior to joining eScholar, Karen was the SLDS Grant manager for the Connecticut Department of Education and the Project Manager and Business Analyst for the State's development of a Teacher-Course-Student data link. In addition she was the lead psychometrician and data analyst for the Connecticut Kindergarten Assessment project. Karen has been with eScholar since October 2012.

Total Years of Relevant Experience:	**7 Years**
Relevant Experience	**eScholar (10/2012 – Present)** **Senior Project Manager** • Responsibilities include managing multiple federal, state and district accounts across the nation, both remotely, via email and telephone, and in person. Operational objectives are developing and updating strategic plans, providing ongoing customer support related to company software implementation and usage, and problem solving with internal colleagues and external clients. • Account Manager for Complete Data Warehouse state clients; North Carolina Department of Public Instruction, Iowa Department of Education and Nebraska Department of Education. • Account Manager for Uniq-ID federal/state clients; Department of Defense Education Activity (DoDEA), Georgia Department of Education, Iowa State Department of Education, Kansas Department of Education, Missouri Department of Education, Nebraska Department of Education, North Carolina Department of Public Instruction, Office of the State Superintendent of Education – Washington D.C. and South Carolina Department of Education. • Account Manager for eScholar Interstate ID eXchange state clients; Iowa Department of Education, Kansas Department of Education and Nebraska Department of Education. **Connecticut Department of Education (12/2006 – 10/2012)** **Project Manager, Business Analyst, Data Analyst and Psychometrician** • Managed software development vendor and worked with the information technology staff to determine the functionality and record layout of the Teacher-Course-Student data application. • Provided support and training to the state's local education agencies and student information system vendors to implement the Teacher-Course-Student data application. • Concurrently served as the Grant Manager for Connecticut's State Longitudinal Data System (SLDS) to coordinate and report on activities related to the building and enhancement of the system to the federal government. • Filled data requests, responded to internal and external questions on data and data applications, and other daily business activities during the absence of a Bureau Chief. • Project Manager, Data Analyst and Lead Psychometrician for the statewide kindergarten assessment. • Participated in the Early Childhood Education Assessment State Collaborative (ECEA SCASS) through the Council of Chief State School Officers (CCSSO). • Participated in the Education Information Management and Assessment Consortium (EIMAC) through the Council of Chief State School Officers (CCSSO).

Karen Addesso	Proposed Role: eScholar Account Representative
Education	

- Bachelor of Science in Mathematics, Southern Connecticut State University
- Master of Education in Policy Studies, University of Massachusetts, Amherst
- Certificate of Advanced Graduate Studies in Research and Evaluation Methods, University of Massachusetts, Amherst

4.3.5 Vendor References

RFP Reference: Section 4.3. Qualifications and Experience, page, 25

4.3.5 The Vendor's proposal should provide references that list names, addresses, telephone numbers, and fax numbers/email addresses of three (3) business references for which work (comparable to that required by this RFP) has been accomplished , and briefly describe the type of service provided. The Vendor must grant permission to WVDE to contact the references. Do not include current WVDE staff as references. Contacting references will be at the discretions of the WVDE

The Deloitte/eScholar team has jointly implemented SLDS solutions for four different SEAs. The following tables describe three of our engagements that have taken place within the last five years. Included in each of the qualifications is a point of contact. These points of contact are business references that WVDE may contact for both Deloitte and eScholar.

Pennsylvania Information Management System (PIMS)

Pennsylvania Public Department of Education

Reference with current telephone number and email address	Dave Ream PDE Project Manager (717) 783-6698 davream@state.pa.us	**Dates of Contract**	March 2007 – Current

Project Description

In 2006 PDE was awarded a grant from the USDOE Institute of Education Sciences to build the Pennsylvania Information Management System, or PIMS. PDE envisioned PIMS as a preK-12 student record management and longitudinal reporting system through which quality data would be available to educators, students, parents, policymakers, and other stakeholders for timely use in supporting teaching and learning, discarding performance gaps between subgroups of students, and contributing to improving the achievement of the students.

PDE selected Deloitte to lead the implementation effort. PIMS has become PDE's data collection and enterprise-wide longitudinal data warehouse and reporting system. It is designed to improve student achievement through more efficient and effective use of data. PIMS was first implemented in during the 2007-2008 school year to more than 800 LEAs throughout the Commonwealth. PIMS for preK-12 serves many purposes, including:

- Meeting the current PDE and federal reporting requirements
- Improving education decision-making through the use of high quality data and decision support tools
- Providing longitudinal tracking of educational progress over time and across LEAs
- Reporting timely and precise education data through standardized and ad hoc reporting capabilities
- Using another USDOE grant PDE expanded PIMS to the public postsecondary sector. PDE, with Deloitte's help, worked with an advisory group representing the 14 community colleges, 14 Pennsylvania State System of Higher Education (PASSHE) universities, two private "opt-in" Institutions of Higher Education (IHEs) and other postsecondary longitudinal data specialists to develop and implement PIMS for Postsecondary in November 2009.
- PIMS has also been enhanced to include data from the National Student Clearinghouse (NSC), a non-profit organization that provides postsecondary enrollment and degree verification services. The NSC maintains a database of current and historical postsecondary enrollment data on students enrolled in 93 percent of the IHEs in the U.S. PDE uses this data to supplement the detailed postsecondary data being collected from the in-state public IHEs.
- Including the postsecondary data within PIMS means that PDE now has a single centralized student-level longitudinal data system covering pre-K through postsecondary undergraduate education.

The implementation of PIMS has resulted in numerous benefits to PDE:

- PDE understands its P-16 educational investments – what works, what does not, and why
- Simplified and standardized the data collection process for PDE, LEAs and IHEs. Redundancy and inconsistency has been eliminated, reducing the burden on LEAs and IHEs
- Allowed PDE to retire 13 data collections and/or data collection systems and re-purpose the staff previously supporting these systems. Strengthened enterprise data integrity and quality. The data in PIMS is collected from LEAs and IHEs through a secure Web-based application using standardized business rules and extensive error checking. These processes make sure that the data collected in PIMS is secure, of a very high quality and provides a single version of the truth throughout the enterprise. This has also resulted in improved data quality at the LEAs and IHEs - the data must be of high-quality in order to successfully submit it to PIMS.
- Improved reporting and analysis capabilities. This includes operational and accountability reporting such as for highly qualified teachers in addition to the ability to answer critical educational questions.

Key Technologies Employed (Hardware and Software Tools)

eScholar Complete Data Warehouse for PK-12

eScholar Complete Data Warehouse for Postsecondary

eScholar Uniq-ID for Students

Cognos

North Carolina Common Education Data and Reporting System (CEDARS)

North Carolina Department of Public Instruction

Reference with current telephone number and email address	George Phelps Functional Systems Analyst (919) 807-3504 George.Phelps@dpi.nc.gov	**Dates of Contract**	September 2009 – December 2010

Project Description

The first phase of CEDARS embraced the challenge of identifying students and staff across the multiple transactional systems that maintained educational data. The Uniq-ID products from eScholar were selected and implemented in early 2009 and to date have assigned identifiers to over 1.4 million students and 320,000 staff members throughout North Carolina. The UID phase enabled NCPDI to connect data that had required extensive manual effort to report on in the past.

Deloitte, eScholar, and NCPDI loaded data from over 22 source system into the data warehouse. Data has been loaded for the 2008-2009, 2009-2010, and 2010-2011 school years. The data crosses a variety of data domains such as students, staff, programs, and assessments and enables reporting and analytics.

The seamless integration of eScholar's Uniq-ID® for Students, eScholar's Uniq-ID for Staff, and the eScholar CDW, along with Oracle BI Reporting tools provides NCPDI with the technological capabilities to meet their requirements while also providing an unprecedented level of visibility into the performance and trends of their educational programs.

Key Technologies Employed (Hardware and Software Tools)

eScholar Complete Data Warehouse for PK-12

eScholar Uniq-ID for Students

eScholar Uniq-ID for Staff

Oracle Business Intelligence Enterprise Edition

New Mexico Student Teacher Accountability and Reporting System (STARS)

New Mexico Public Education Department			
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Project Description

The Student Teacher Accountability and Reporting System (STARS) is an eScholar CDW-based SLDS for the New Mexico state and local PK-12 community. New Mexico's 89 school districts and the New Mexico Public Education Department (PED) submit a wide variety of data to STARS enabling users – PED administrators, district administrators, principals, teachers, and other State stakeholders such as legislative committees and staff – to report on and analyze data. Prior to STARS, New Mexico used a home grown system known as the Accountability Data System (ADS) to collect and report on education data. ADS met the State's needs for a few years until audits highlighted significant data quality issues and significant changes in federal and state reporting requirements driven by the No Child Left Behind Act were implemented.

Upon PED's selection of the Deloitte team, the implementation of the first phase of STARS began in December 2005. Significant activity ensued over the next ten months:

- By Spring of 2006 an operational prototype was developed, tested, and a STARS pilot with 11 districts was successfully completed.
- The pilot identified several problems with PED's legacy unique student identification. By August this system was replaced with eScholar Uniq-ID® for Students COTS product and training was delivered to district staff.
- During July and August more than 200 district and PED staff received training on data submission to STARS.
- In August, the Governor and Secretary of Education announced the results for State and District Adequate Yearly Progress (AYP) – a key NCLB indicator – for the 2005-2006 school year based on STARS.
- In September, reports were made available to State and District users.
- In October, districts submitted data to STARS for the 40th day data collection.

At the completion of Phase 1 STARS was, by any definition, operational. The achievements described above were accomplished in a manner that respected district autonomy. Districts were not required to invest in new systems to comply with STARS. Instead, STARS interfaced with more than 12 different district student information systems (SIS). Districts without a SIS were provided with a custom Microsoft Access database application to track the information they needed to submit to STARS.

Phase 2 focused on the loading of additional types of data into STARS (e.g. financial), the development of dozens of new reports, the coaching and training of PED staff with respect to Cognos report development and the assessment of STARS data quality.

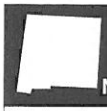
Phase 3 of STARS took place between August 2007 and February 2008. This phase included the continued development of new reports and mentoring of PED report developers. It also included the development of a proof-of-concept for a statewide education portal. PED has understood from the initial conceptualization of STARS that the goal is to provide simple reporting and analytical tools to principals and teachers to enable them to use integrated data and content. The portal will one day be the platform that delivers these capabilities.

Deloitte continued to provide software licensing and support services through 2010.

STARS has provided New Mexico with one of the first successful educational data systems of its kind. The State now has detailed data on 325,000 students and 50,000 staff members in the State as well as processes in place to collect such data on a regular basis. The data is more detailed, comprehensive, timely and accurate than ever before.

Additional significant accomplishments include:

- STARS has enabled the State to comply with complex federal and state requirements including the calculation of AYP (as previously described), the calculation of Highly Qualified Teachers (another key NCLB indicator), the determination of State appropriations to districts (State Equalization Guarantee), and EDFacts (federal reporting).
- With its powerful decision support tools, STARS has established new capabilities at the state and district levels. The State and districts can now answer previously unanswerable questions such as "What is the impact of specific programs and services? " and "What investments distinguish high-performing schools (based on assessment results) from other schools?".



New Mexico Public Education Department

- PED and the districts can now measure the impact of their investments at a granular level, helping them identify industry practices and obtain a better understanding of what works and what does not, even comparing results between specific student populations or socio-economic groups. This capability will produce more efficient educational decision-making and policy setting, which over the long term will result in improved student achievement.

STARS has eased the data collection burden on school districts and the State Department of Education while improving overall data quality. As evidence of the reduced burden, during the 2007-2008 school year for the first time five districts submitted data during the first week of the first reporting period (40th Day) rather than waiting until the end of the period.

Key Technologies Employed (Hardware and Software Tools)

eScholar Complete Data Warehouse for PK-12

eScholar Uniq-ID for Students

Cognos

4.4.1 Goal I: Architecture, Infrastructure, and Development

RFP Reference: Section 4.4. Qualifications and Experience, page, 26-27

As part of the WVDE's PK-12 SLDS initiative, the first goal is to contract with a vendor that can provide the necessary components and identify the necessary architecture, infrastructure, and software deliverables needed to build and train on a Data Warehouse and Reporting System (DWRS), either through the Vendor's own resources and/or through subcontractors. If using a subcontractor, the WVDE will only sign a contract with the successful Vendor that will act as the single point of contact for the WVDE and who retains responsibility for the performance of this contract and the work performed by its subcontractors.

As part of goal 1, the WVDE seeks to ensure that the successful vendor is able to provide a stable environment for the DWRS. This includes assuring that (I) all proposed hardware meets all needs of the DWRS and maintains a high level of availability (available at least 22 hours daily); (2) software is developed or maintained to address issues in a timely fashion; and (3) network issues result in as few outages as possible (historical performance of no more than one per quarter).

The Deloitte/eScholar team has a strong understanding of SLDS as well as its architecture, infrastructure and development. We have successfully implemented similar SLDS for four other state education agencies. These SLDS are currently running in production environments at other SEAs and in many cases for several years.

We have implemented our SLDS solution in SEAs compromising of up to 1,800,000 students, up to 135,000 teachers/administrators and over 800 LEAs. We have also supported SEAs with RESAs or similar intermediate units being part of the organizational structure.

- Four successful SEA project implementations in diverse technical environments
- Our solution has supported SEAs as large as 1.8 million students, 135,000 staff/administrators and over 800 LEAs

Our implementations have supported a variety of SEA infrastructures ranging from collecting data directly from individual school districts using different Student Information Systems (SIS) to sourcing data from centralized data sources such as a statewide SIS, such as WVEIS. We have successfully also implemented our solution with different database platforms including Oracle and SQL Server and different reporting tools such as Cognos and OBIEE to leverage existing client investments.

The Deloitte/eScholar team understands the importance of having a robust, scalable and stable solution for the WVDE SLDS. With those critical objectives in mind, we propose to use market leading COTS (COTS) products. This includes the eScholar Complete Data Warehouse for PK-12 (CDW) for the collection, cleansing, validation and integration of the data in addition to optimized storage in the Staging Database and Data Warehouse and IBM Cognos Business Intelligence products for standard and ad hoc reporting as well as Online Analytical Processing (OLAP).

Using industry leading COTS products such as eScholar's product suite and IBM Cognos Business Intelligence products will enable WVDE to not only effectively meet all the needs of the SLDS, but it will also create a stable environment for the SLDS in a short amount of time. We have proposed hardware which will provide a high availability environment which should meet or exceed WVDE's requirements. eScholar and IBM also have robust software development, technical support and software issue resolution capabilities to enable WVDE resolve any technical issues in a timely fashion. Our experience in implementing similar SLDS for other SEAs will allow our team to implement a solution with no network outages due to our design.

4.4.1.1 Vendor's Ability to Meet RFP Specifications

RFP Reference: Section 4.4. Qualifications and Experience, page, 26

4.4.1.1 For the successful Vendor to provide a DWRS owned and operated by the WVDE-and accessible to the WVDE, Regional Education Service Agencies, Local Education Agencies, schools, and the public. Vendors are to provide proof of their ability to meet the specifications associated with goal objectives and required by this RFP,

As indicated in the previous section, our solution includes the eScholar suite of products as well as the IBM Cognos Business Intelligence suite of products. We have successfully implemented this solution in Nebraska, New Mexico and Pennsylvania. Nebraska has a student population (approximately 295,000) similar to West Virginia's while having over 250 LEAs. New Mexico has a student population of close to 340,000 students with 89 LEAs. Pennsylvania has a student population of over 1.8 million students with over 800 LEAs. We have also implemented a similar solution involving a statewide SIS with a different reporting tool in North Carolina where the student population was over 1.4 million students and 115 LEAs.

We are proposing the eScholar CDW because it provides a single, proven and highly integrated solution to meet the majority of the WVDE requirements out-of-the-box. This low risk solution allows WVDE to quickly establish the SLDS and concentrate on your unique requirements. Key features include:

- The eScholar CDW data model supports the integration, cleansing, and analysis of more than 3,000 data elements across 40 education data categories or "domains".
- The eScholar CDW has built-in processes for data submission, validation, and loading. Over the years, eScholar has developed more than 750 powerful and well-documented data transformation, integration, and cleansing routines. These routines contain more than 30,000 individual transformation steps and have been proven and enhanced through the loading of millions of actual records for schools and students across the country. A routine can contain more than 200 verifications, transformations, and recodes which are essential to getting clean, valid data into a data warehouse.
- The eScholar CDW provides a solution for managing Federal accountability reporting requirements including the No Child Left Behind Act's (NCLB) Adequate Yearly Progress (AYP), Highly Qualified Teachers (HQT) and Education Data Exchange Network (EDEN) reporting.

Using eScholar's COTS CDW eliminates the need for lengthy and expensive design and development phases, thereby reducing the overall project timeline, cost, and risk. For this reason, and due to our team's significant experience implementing similar solutions for other state education agencies, we propose to complete this project in just 9 months.

The following figure depicts our solution for the SLDS.

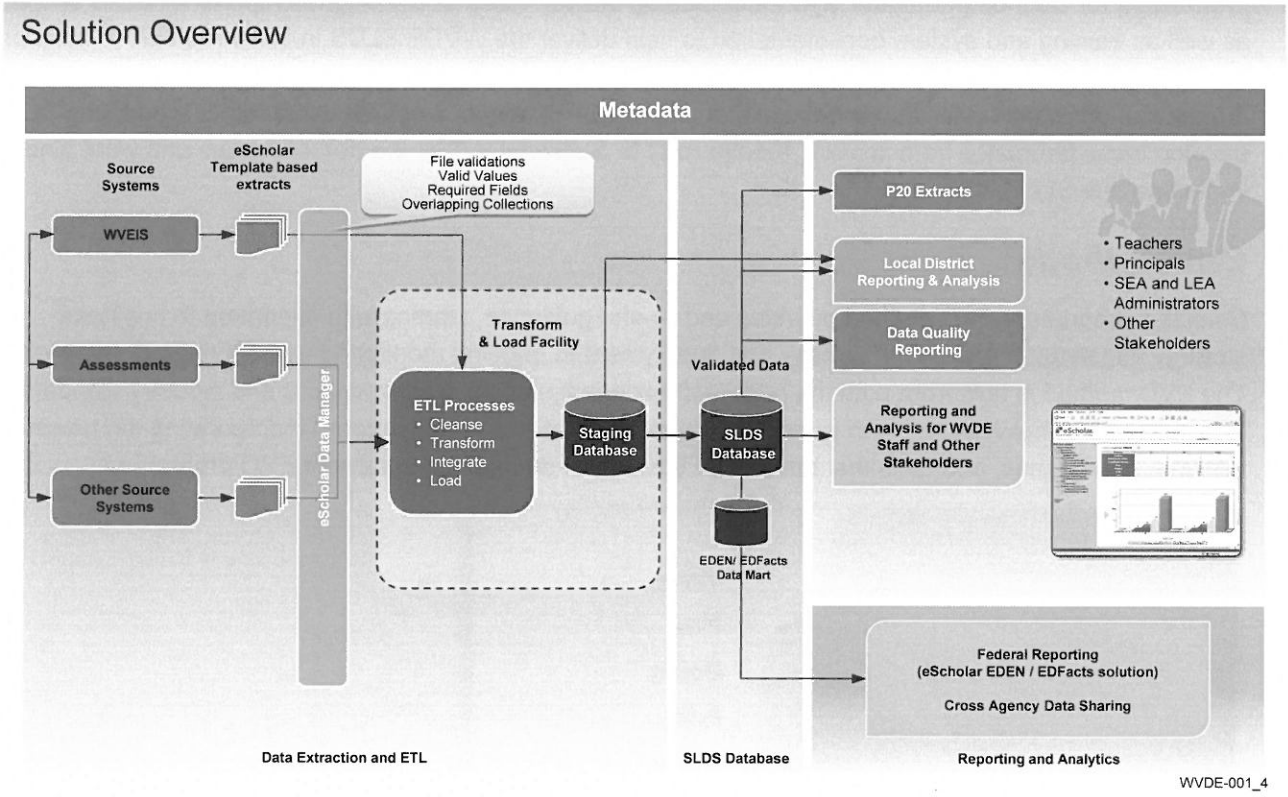


Figure 4.4.1-1. SLDS Solution Overview.

Data from source systems such as WVEIS and others will be loaded into the eScholar CDW staging database using the eScholar pre-defined extract format. The data will be cleansed, transformed and validated during this process. The data from staging will then be moved to the eScholar CDW SLDS production database upon validation. A variety of reporting and analytics as well as P20 extracts will be developed on top of the SLDS data for various different users and stakeholders. Examples of reporting and analytics include Federal reporting (through the eScholar EDEN Solution), District and School level reporting and State level reporting and analysis. Please refer to *Section 4.4.2* for more details on how the data is loaded into the SLDS and *Section 4.4.3* for more information on Reporting and Analytics.

4.3.1.1.a Detailed Explanation of the Process to Implement a DWRS

RFP Reference: Section 4.3. Qualifications and Experience, page, 26

Vendors are to provide proof of their ability to meet the specifications associated with goal objectives and required by this RFP, include the following:

- 4.3.1.1.a. a detailed explanation of the process and associated steps taken to implement a DWRS;

The Deloitte/eScholar team has the right methods, tools and approach to successfully deliver the SLDS. We have formulated the work plan based on our proven Enterprise Value Delivery (EVD) for Information Management methodology, tailored to meet the objectives and specifications of WVDE, as well as our accelerators from prior SLDS implementations.

We plan to leverage our SLDS data dictionary and extract specifications templates, the eScholar CDW Framework for Cognos (metadata layer), our catalog of over 1,000 SLDS Cognos reports for LEAs and SEAs as well as training and system documentation to help deliver the WVDE SLDS in just 9 months. In addition, our EVD method which is described below, provides us with standardized templates for key deliverables and project management artifacts which enable us to focus on quality and deliver value rather than trying to develop these templates from scratch. Please refer to *Section 4.4.5* for the detailed steps and work plan to implement the SLDS.

Our Methods

Deloitte's proprietary EVD method provides end-to-end guidance, starting with alignment to business strategy and extending beyond strategy and deployment to ongoing monitoring and continuous improvement. The EVD method is built from both the hands-on experience of our global practice and industry standards. The method's effectiveness lies in its continuous refinement and improvement - incorporating the newest thinking, approaches, and tools that have been developed and refined in current EVD programs.

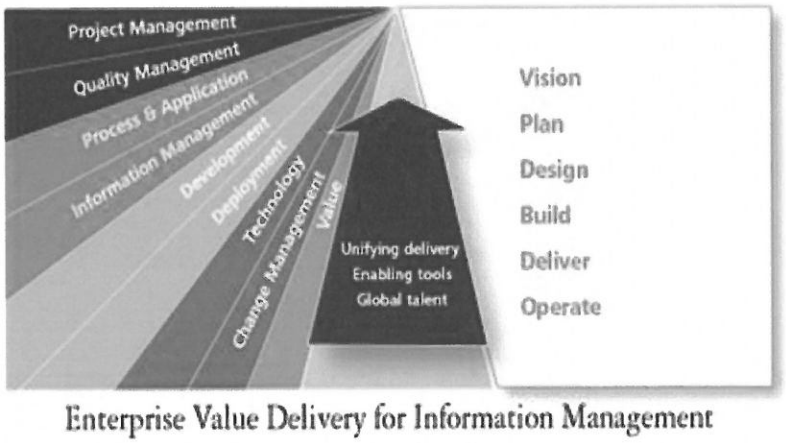


Figure 4.4.1-2. Deloitte's Enterprise Value Delivery for Information Management.
The EVD method adds discipline and rigor to help our project teams succeed and our clients realize value.

The EVD method contains structured development processes, tools, templates, and sample deliverables that benefit Information Management (IM) engagements by:

- Enhancing quality of deliverables through the use of leading practices and tools
- Reducing program risk with a set of standardized, demonstrated development processes
- Improving development effectiveness with the use of templates and sample deliverables

Structure Overview

The EVD method structure follows the basic project life cycle: Plan, Design, Build, and Deliver. However, what makes this method unique is its focus on the commonly missed and vital activities: preplanning and post-delivery.

The method first defines the overarching EVD strategy that will support your organization's strategy. Then, the method helps that strategy come to fruition by focusing on the management, control, and operation of the IM processes and applications, along with continuous performance evaluation. It also aids in the preparation

of building a scalable solution, which accounts for your organization's future growth and change from the onset of the project.

Not only does the method cover project implementations throughout the life cycle, but it also covers projects from a top-down perspective—considering the affected disciplines that must be managed during a project implementation.

The method also includes templates, accelerators, and samples so practitioners can quickly deliver value to your business. In short, the EVD method adds discipline and rigor to help our project teams achieve goals, and help your organization realize value. In short, the EVD method adds discipline and rigor to help our project teams succeed and our clients realize value.

Structure Details

Within EVD, method content is organized by disciplines and sub-disciplines. Disciplines represent a high-level grouping of related tasks across phases, with sub-disciplines representing a sub-grouping of tasks within the discipline. Each task summarizes the work that needs to be performed, and produces a task deliverable. Examples of tasks:

- Develop Project Charter (Project Management)
- Define Information Governance Requirements (Information Governance)
- Define Application Infrastructure Requirements (Technology)
- Deliver Ongoing Communications (Organizational Change Management)

The following table shows the different components of the EVD method:

Phase	A stage in the project life cycle.
Discipline	A high-level grouping of related tasks across phases. Focuses on what is being done, rather than who is doing it.
Sub-discipline	The subdivision of a discipline into a grouping of closely related tasks performed across the phases.
Task	The lowest level in the work breakdown structure for each method.
Steps	A list of instructions for creating the work products for each task (optional).
Work Product	The end result of each task.
Job Roles	Standard project roles defined by the method.
Development Aids	Includes accelerators and procedures.

Figure 4.4.1-3. EVD Components.

Business Intelligence/Data Warehouse Pathway

The EVD Methodology has six different pathways, which correlate to six different client needs within Information Management based on our experience. The six pathways are Business Intelligence/Data Warehousing, Enterprise Data Management, Enterprise Content Management, Strategy, Performance Management, and Web Channel Solutions.

The pathway that currently best aligns with WVDE's needs based on the RFP is the Business Intelligence/Data Warehousing (BI/DW) pathway. The Business Intelligence and Data Warehousing (BI/DW) pathway outlines the management of assessing, creating, and distributing the business usage of BI and DW capabilities. It also contains the key supporting EVD disciplines needed to deliver and maintain these solutions. Other pathways may be leveraged as necessary in future phases.

Business Intelligence and Data Warehouse Solutions

The BI/DW pathway contains tasks for designing and delivering a range of potential solutions to meet a wide range of client needs:

- Strategy Development
- Data Warehouse Construction and Management
- Business Intelligence and Data Warehousing Tool Selection
- Data Profiling Management
- Management Reporting
- Operational Reporting
- External Reporting
- Scorecards and Dashboards
- Analytical Reporting
- Data Mining

We will be primarily focusing on most of the activities above during our SLDS implementation at WVDE with the exception of Data Mining, Business Intelligence and Data Warehousing Tool Selection, and Data Profiling Management.

The Advantages of the EVD Method for WVDE

The method drives quality business outcomes in support of your organization's information.

The EVD method offers value to WVDE by delivering:

- **Improved quality**: High-quality projects result from using standardized best practices and deliverables.
- **Reduced risk**: Standardized processes facilitate best practices and lessen exposure to risk.
- **A scalable solution**: Adaptability is built into the solution to account for business growth and evolution.

- **A business-driven solution**: A technical solution is integrated with business processes that support the solution.
- **Enhanced response time**: Accelerated deliverables allow more flexibility and speed in responding to business needs.
- **Reduced search and development**: Best practices allow for less resources and time spent on search and development—there is no need to "reinvent the wheel."
- **Reusability**: EVD can be used in future projects to aid in achieving a more streamlined and structured implementation process.

The business outcomes that WVDE can gain:

- **Consolidated best practices and deliverables**: Reduces risks as well as research and development time
- **Scalability**: Accounts for your organization's future growth and change from the onset of the project
- **Faster delivery**: Provides our project teams with tools and capabilities to efficiently drive value
- **Cost reduction**: Standardized best practices and streamlined processes allow for cost reductions across the board
- **Smaller resource need**: More efficient processes mean fewer resources needed for project implementations
- **Improved decision making**: Increased decision-making power by having more access to an higher quality of information in real time
- **Consistent delivery**: Consistent project execution across the organization, as the method provides repeatable best practices

4.3.1.1.b Proposed Software

RFP Reference: Section 4.3. Qualifications and Experience, page, 26

Vendors are to provide proof of their ability to meet the specifications associated with goal objectives and required by this RFP, include the following:

- 4.4.I.I.b. a list of all proposed software required to implement the DWRS. List the manufacturer of the software and recommended version levels. If the successful Vendor has developed custom software for components of the DWRS, this software should be described along with details about successful implementations with other customers. Specify whether the software is server side or client side and specify the acceptable browsers and any necessary plugins at the client level;

The Deloitte/eScholar team proposes to use the following software for the WVDE SLDS implementation.

Software	Description	Version #	Client/ Server side	Acceptable browsers	Required Plug-ins
eScholar Complete Data Warehouse® for PK-12	CDW PK-12 is robust, highly scalable repository for storing the areas of PK-12 education data. It is the most widely used COTS solution in the market today.	15	Server	N/A	N/A
eScholar Data Manager™ (eDM)	The eScholar CDW incorporates eDM, an intuitive, browser-based data management tool to seamlessly manage submission of data by both state and LEA personnel in a centralized or decentralized environment. The interface allows Data Administrators to configure the system – data collection periods, data sets to be collected, data quality checks, user access, roles, and permissions, event-triggered email notification, automation, and more. eDM currently manages the receipt and loading of data from hundreds of LEAs or schools, or from state facilities, and presents load statistics and user-friendly data quality and data error reports to appropriate parties.	15	Server	Safari 5 – 6; IE 9 – 10; Firefox 23 – 24; Chrome 28 - 29	N/A
eScholar eTL™	eTL is a portion of the eScholar data loading process that transforms, cleanses and loads data into the warehouse (aka "eScholar Transform and Load" software). Our solution provides the ability to easily configure and collect data from many disparate systems into a centralized Staging Database. Typically, data extracts from each LEA Student Information System (SIS) are provided in standard, predefined data formats ("templates") which are loaded into a staging location	15	Server	N/A	N/A
eScholar Data Integration Templates™	eScholar Data Integration Templates are the standard formats of data that the eScholar CDW can transform, cleanse, load and process. Data in the staging location is validated and cleansed prior to it being loaded into the data warehouse. Data administrators are provided error files that allow for the correction and resubmission of incomplete or erroneous data. Once data is corrected, it is validated and cleansed again, and then uploaded into the data warehouse.	15	Client	N/A	N/A
eScholar EDEN Solution™ with EDEN/EDFacts Reporting	The eScholar EDEN Solution manages the consolidation, aggregation and calculation of data for submission to the EDFacts portal. Data can be sourced either from the eScholar CDW or external systems.	15	Server	N/A	N/A

Software	Description	Version #	Client/ Server side	Acceptable browsers	Required Plug-ins
eScholar Framework™ for COGNOS®	The eScholar Framework for Cognos provides the basic structure within Cognos that predefines the relationships between eScholar tables, and groups them into logical data domains for easy reporting from the eScholar data warehouse solutions.	15	Server	N/A	N/A
IBM Cognos 10 Business Intelligence Suite	The Cognos 10 Business Intelligence Suite is used to address the standard and ad hoc reporting needs of WVDE. This environment utilizes the eScholar CDW as its data source to provide WVDE with an extensive set of both pre-defined and ad hoc reports.	10.2.1.1	Server	IE 7 – 10; Firefox 11, 12, 17	ActiveX plug-ins
Microsoft SQL Server	SQL Server is a relational database management system designed for organizations looking to efficiently protect, unlock and scale the power of their data across the desktop, device, datacenter and private or public cloud.	2008	Server	N/A	N/A

Figure 4.4.1-4. Recommended SLDS Software

4.3.1.1.c Proposed database infrastructure

RFP Reference: Section 4.3. Qualifications and Experience, page, 26

Vendors are to provide proof of their ability to meet the specifications associated with goal objectives and required by this RFP, include the following:

- 4.4.l .l .c. the proposed database infrastructure to be utilized for the DWRS. List any unique features of the proposed database which are critical to the implementation of the DWRS. Describe any limitations the database may have related to access using standard SQL. Describe any connectivity options such as Open Database Connectivity [(ODBC)/Java Database Connectivity(JDBC)] the database supports;

The eScholar solution includes a Staging Database that will use the eScholar CDW data model, which is a conformed dimension star schema that integrates a broad range of data and enables fast and easy reporting. The conformed dimension structure is an essential design element, as it supports the ability to manage the complex relationships between important entities such as students and staff, as well as programs and locations. The data model includes eScholar's design for storing assessments of types in a single data structure that enables multiple assessments from different vendors to be analyzed within a single query.

As we have done successfully for numerous customers, we are proposing the eScholar CDW data model for both the Staging Database and the SLDS database (see Solution Overview figure above for an illustration of the roles each play in the solution). Among many benefits, such an approach allows the same reports to be used for validating data in the staging area as well as for reporting against the Data Warehouse. Our proposed technical architecture addresses the long term requirements of the WVDE SLDS by segregating the application in logical tiers. This logical approach provides the maximum amount of isolation between the tiers and flexibility for future growth and expansion.

The system further utilizes a relational database and data can be accessed through Business Intelligence and/or Statistical modeling tools that support both native and ODBC connections for querying. The ODBC, JDBC and SQL capabilities inherent in MS SQL Server can be leveraged without any limitation.

The CDW provides the capacity to store 15 years of data. There are no limits (either architecturally or by license) on the scope of K-12 detail or data that can be stored and analyzed. The eScholar CDW solution is scalable and will provide the necessary room to grow and accept data from many sources.

4.3.1.1.d Minimum hardware requirements

RFP Reference: Section 4.3. Qualifications and Experience, page, 26

Vendors are to provide proof of their ability to meet the specifications associated with goal objectives and required by this RFP, include the following:

- 4.4.I.I.d. the minimum hardware requirements for all servers used as a part of the DWRS, along with details about hardware required to accomplish load balancing if needed;

We propose to leverage the existing WVDE infrastructure, including pre-existing WVDE physical and virtual servers as applicable, to implement **up to two instances** of our solution:

1. Development/Test/Training
2. Production

We recommend that WVDE implement a Development/Test/Training environment that replicates the production environment. Based on our experience at other SEAs and the expected number of users in WV, we are proposing to strike a balance between performance and availability on the one hand and reasonable costs on the other hand, and, as a result we do not propose to provide for load balancing.

We have had success in deploying the proposed solution on virtual servers, although some customers chose to run the databases on a physical server. Our recommendations for the SLDS Production environment hardware are detailed in the table below.

Component	Description	Hardware			Software	
		CPU - Cores	Storage	Ram	Operating System	Database
1. Staging Database Server	RDBMS	8 cores	500 GB capacity	32GB RAM	MS Windows Server 2008 R2 (64-bit) Standard Edition	MS SQL Server 2008 Enterprise Edition
2. Production Database Server	RDBMS	8 cores	500 GB capacity	32GB RAM	MS Windows Server 2008 R2 (64-bit) Standard Edition	MS SQL Server 2008 Enterprise Edition
3. eScholar Application ETL Server	Runs eScholar's Data Manager Software - Batch Manager and Data Flow ETL	8 Cores	100 GB capacity	8GB RAM	MS Windows Server 2008 R2 (64-bit) Standard Edition	
4. eScholar Application Data Integration Server	Runs eScholar's Data Manager Software - File Manager and Tomcat	4 Cores	80 GB capacity	4GB RAM	Microsoft Windows Server 2008 R2 (64 bit) Standard Edition	
5.eScholar Web Server	Runs Apache Web Server	2 Cores	40+ GB capacity	2GB RAM	Microsoft Windows Server 2008 R2 (64 bit) Standard Edition	
6.Cognos 10 Server	Runs Cognos 10 server software	4 Cores	50 GB	12GB RAM	Microsoft Windows Server 2008 R2 (64 bit) Standard Edition	

Figure 4.4.1-5. Recommended SLDS Hardware Specifications.

4.3.1.1.e Network requirements

RFP Reference: Section 4.3. Qualifications and Experience, page, 26

Vendors are to provide proof of their ability to meet the specifications associated with goal objectives and required by this RFP, include the following:

- 4.4.I.I.e. the network requirements of the proposed solution, along estimated bandwidth needs as well as documentation supporting the estimates;

Based on our experience with other SEAs, we believe that our solution will be compatible with the WV K-12 public school network environment described on page 21 of the RFP. We have worked with SEAs where the LEAs and Schools had a wide variety of network connectivity including 56 kb lines.

We understand that a majority of the stakeholders will require access to the SLDS. However, due to the nature of the centralized data systems in WV, we believe that the direct access requirements will be around the Cognos reporting rather than the eScholar products and database.

We understand that most public schools have T-1 lines whereas less than 10 schools have 56kb lines. Based on our experience with other SEAs, we do not anticipate any performance issues accessing the Cognos reports through T-1 lines. The schools which have 56kb lines may experience delays in accessing and downloading large reports.

We do not anticipate any performance issues loading data into the eScholar CDW as well as accessing the SLDS database which we anticipate will be limited to the WVDE LAN, especially give the volume of data we anticipate based on the student population and number of LEAs.

4.3.1.1.f Methodology used to determine storage capacity requirements

RFP Reference: Section 4.3. Qualifications and Experience, page, 26

Vendors are to provide proof of their ability to meet the specifications associated with goal objectives and required by this RFP, include the following:

- 4.4.I.I.f. the methodology used to determine storage capacity requirements of the proposed solution. The initial storage capacity of the proposed solution should allow for ten years of longitudinal databased on a student population of approximately 300,000 students and approximately 40,000 teachers and administrators. Describe scale up strategy for additional storage and its maintenance. Include any cost details in the separate cost proposal

Our methodology is based on our experience. We compared a similar sized state (based on student population), New Mexico, and developed our calculated value from extrapolating those values.

For West Virginia we are estimating 20 GB per school year for the Staging and SLDS database. The table below shows the anticipated storage requirements over time:

School Years in the Data Warehouse	Estimated Disk Space Required in Gigabytes
1 year	20
5 years	100
10 years	200
20 years	400

*Please note that these numbers will need to be doubled considering that we have two databases in our solution - staging and production.

Figure 4.4.1-6. Storage Requirements for the eScholar CDW database.

4.3.1.1.g Additional Hardware and Software

RFP Reference: Section 4.3. Qualifications and Experience, page, 27

Vendors are to provide proof of their ability to meet the specifications associated with goal objectives and required by this RFP, include the following:

- 4.4.I.I.g. any additional hardware or software that is required to make the system fully functional which was not listed in the previous sections such as firewalls or minimum requirements for workstations;

eScholar will supply the software components to implement the eScholar components of the solution except for the DBMS. The software components eScholar will supply will include the components for the eScholar web server which uses Apache.

The following additional components are required to support the IBM Cognos Business Intelligence Suite:

Component	Description
Web server	A Web server must be installed and started.
Java™ Runtime Environment (JRE)	An IBM JRE is installed automatically with IBM Cognos BI on Windows.
Web browser	For Web browsers, the following must be enabled: • cookies • JavaScript For Microsoft Internet Explorer only, the following must be enabled: • Run ActiveX controls and plug-ins • Script ActiveX controls marked safe for scripting • Active scripting • Allow META REFRESH For Microsoft Internet Explorer version 10, validate that Automatically recover from page layout errors with Compatibility Mode is enabled on the Advanced tab of Internet Option.

Figure 4.4.1-7. Additional Required Components.

4.3.1.1.h Hardware Diagram

RFP Reference: Section 4.3. Qualifications and Experience, page, 27

Vendors are to provide proof of their ability to meet the specifications associated with goal objectives and required by this RFP, include the following:

- 4.4.I.I.h. a diagram, including notations/descriptions, that shows the system configuration and alternatives for each layer including the need for dedicated hardware or the use of virtualized services. Describe how the Vendor will work with the WVDE to ensure all required hardware and software are in place to successfully develop and implement the DWRS. While the WVDE intend s to purchase required hardware (including servers, backup hardware, network cards, etc.) external to this RFP, the vendor may provide, as an option, a cost proposal for vendor supplied servers and additional hardware as part of the cost proposal as outlined in Section 5.3.;

The Deloitte/eScholar team understands that the hardware and software will need to be setup as soon as possible to avoid any project delays. We have allocated the first two months in the project plan for WDVE to procure the hardware/software as well as complete the installation and configuration. Our team will work with WVDE to monitor the procurement, installation and configuration of the hardware and software products. SMEs from our team will be available to work with WVDE to install and configure the proposed eScholar products and IBM products.

Please note that we intend to use pre-existing virtual servers, and possibly physical servers, already in place at WVDE's hosting facility to install our solution on. Our proposed software – the eScholar suite, IBM Cognos suite and Microsoft SQL Server can be installed and configured on virtual servers.

The diagram below shows the proposed hardware architecture diagram. The servers are numbered to matchup with the hardware specifications list provided in *Section 4.3.1.1.d.*

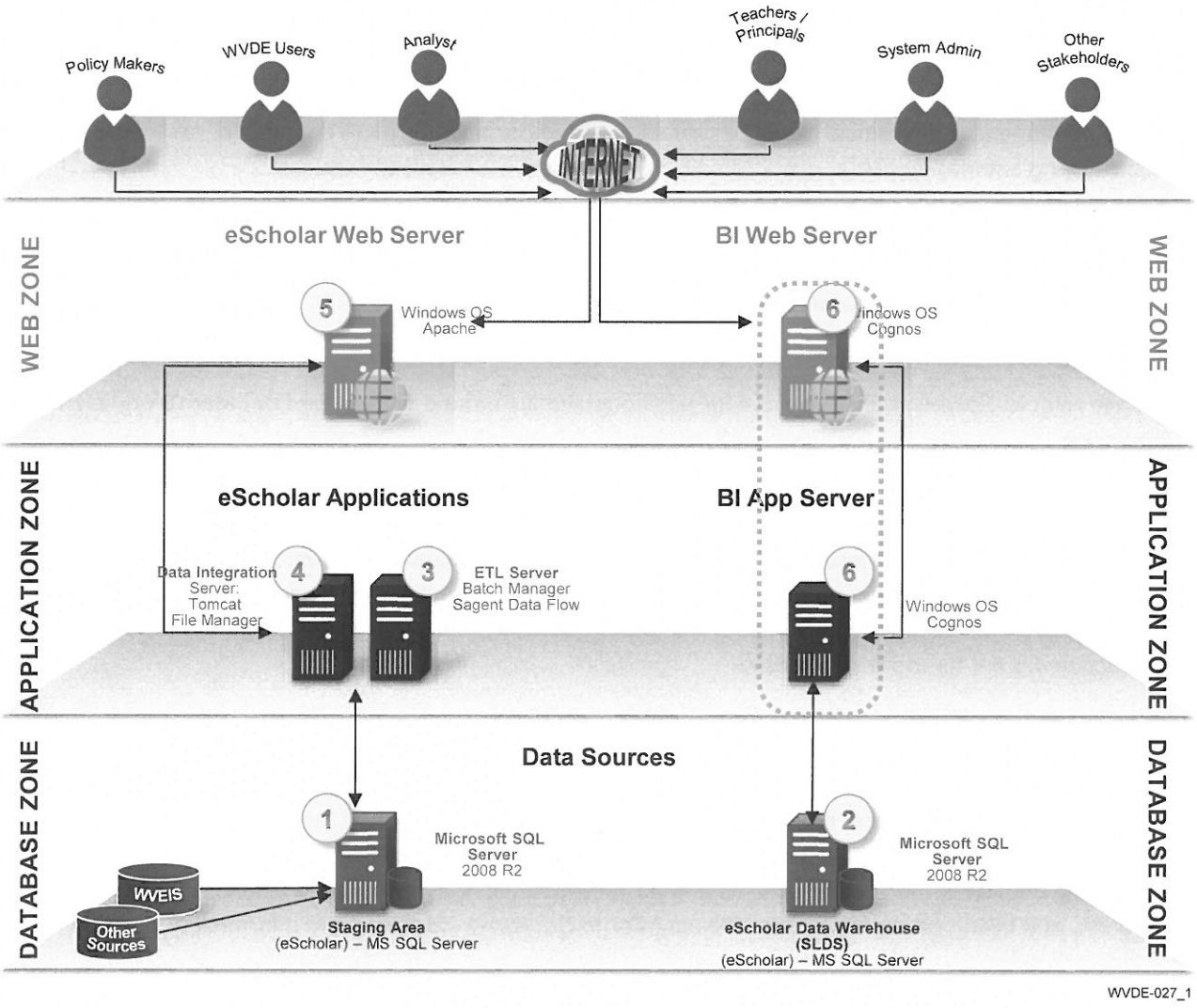


Figure 4.4.1-8. SLDS Application Architecture.

4.3.1.1.i How we will Staff

RFP Reference: Section 4.3. Qualifications and Experience, page, 27

Vendors are to provide proof of their ability to meet the specifications associated with goal objectives and required by this RFP, include the following:

- 4.4 I.I.i. how the Vendor will adequately staff this objective. Include a description of the Vendor's organizational hierarchy, the communication protocols and structure to keep the WVDE informed, and the identification of critical issues/problems and how those are escalated and monitored until resolution.

Staffing and Organization Chart

We understand that it is critical to staff a project of this importance with the right mix of personnel that meet the following criteria:

- Experience in the K-12 Education Industry
- Possess strong understanding of Education data
- Have extensive experience with the proposed tools
- Possess strong project management skills

Please refer to *Section 4.3.3* and *4.3.4* for additional details around staffing and our team's organizational hierarchy.

Communication

Effective communication, formal and informal, is a basic requirement for any successful project. The Deloitte/eScholar team believes that keeping participants in the SLDS implementation process equally informed of project status and conditions is the reasonable way to avoid surprise and confusion. Please refer to *Section 4.4.5.1* for more information.

Issue Tracking and Resolution Process

Effective control of a complex project demands a project team that is skilled in the resolution of deviations from the original project work plan. Issues range from contract compliance to requirements/design approaches to potential change orders. Our approach to problem identification and resolution involves identifying causes of the problem, identifying possible solutions, evaluating the solutions, selecting the right solution, and taking corrective action. Please refer to *Section 4.4.5.1* for more information.

Risk Management

Deloitte has successfully completed many complex, large-scale multi-year projects. We understand the importance of anticipating potential issues that can affect the project work plan, schedule, and staffing. Our Project Risk Management approach provides a proactive process to identify issues in a timely fashion. We will work with WVDE on early issue detection and resolution. This proactive approach will provide the parties the opportunity to address contingency planning on a case-by-case (issue-by-issue) basis. Please refer to *Section 4.4.5.1* for more information.

4.4.1.2 Validation Processes

RFP Reference: Section 4.4. Qualifications and Experience, page, 27

4.4.1.2 Ensure that the DWRS solution includes appropriate validation processes to ensure consistency from source and each step through which the data travel that result in end-use of the DWRS. Specify the proposed process, time line, and benchmarks to validate data from source to destination that includes each step through which the data will travel; and identify, repair, and notify WVDE staff with regard to data validation.

The Deloitte/eScholar team understands that it is critical that the SLDS be loaded with validated data from WVEIS and the other sources. Our solution includes eScholar Data Manager™ (eDM), an intuitive, browser-based data management tool enabling submission of data in a centralized or decentralized environment. The interface allows System Administrators to configure the system – data collection periods, data sets to be collected, data quality checks, role-based user access including a Help Desk role, event-triggered email notification, automation, and more. eDM manages receipt and loading of data from state personnel as well as hundreds of LEAs and from other data sources and data providers. eDM also presents load statistics and user-friendly data quality and data error reports to designated personnel.

Our eScholar solution has built-in routines for data submission, validation, and loading. eScholar has more than 750 powerful and well-documented data transformation, integration, and cleansing routines. These routines contain more than 30,000 individual transformation steps and have been proven and enhanced through the loading of millions of actual records for schools and students across the country.

Through eDM, System Administrators can define any number of data quality constraints, and apply those checks to a particular data collection. Data files submitted to the system are first validated against this set of data quality checks. The data quality checks available within the system can be categorized as follows:

- **Logical Constraints** are automatically applied by the system and do not need to be explicitly set. Examples include data type validation such as ensuring *date* elements contain valid dates or *numeric* elements contain numeric values.
- **Configurable Data Quality Rules** can be configured by System Administrators for any data set and any data collection using eDM's intuitive interface.
  - **Single-field Validation** rules relate to a single data element. Examples include validating incoming data against a defined set of valid values, or validating dates or numbers are within a specified range.
  - **Compound/Conditional Validation** rules involve more than one data element, and are often of the IF THEN form.
    - Example: IF a student's Current Grade Level = (09, 10, 11, or 12), THEN that student's Grade 9 Entry Date must be populated

In addition to the significant data quality checks described above, **advanced customer-specific business rules** are optionally available to WVDE. These inherently require custom SQL to validate, and typically involve multiple data sets and/or both incoming and existing data (data already loaded to the Staging Database). An example is:

- The sum of a staff member's assigned time across his/her assignments must not exceed __% (for example, 110%)

These advanced rules are defined in detail by customer personnel in collaboration with the eScholar product team, and are coded and implemented by eScholar in the customer's installation. Once implemented, these rules are available to be applied to any appropriate data collection and data set by the customer's System Administrators. The process of defining, coding, testing, and implementing these rules is consultative. These consultative services are included in our proposal as optional.

Files and records that fail the data quality checks are identified in error reports accessible by their respective data owners. eDM contains an e-mail notification system to send configurable alerts based on system events. Alerts can be triggered to notify specific user groups regarding events such as data validation errors that require user intervention. Users are then able to view the status of any data submitted through the application.

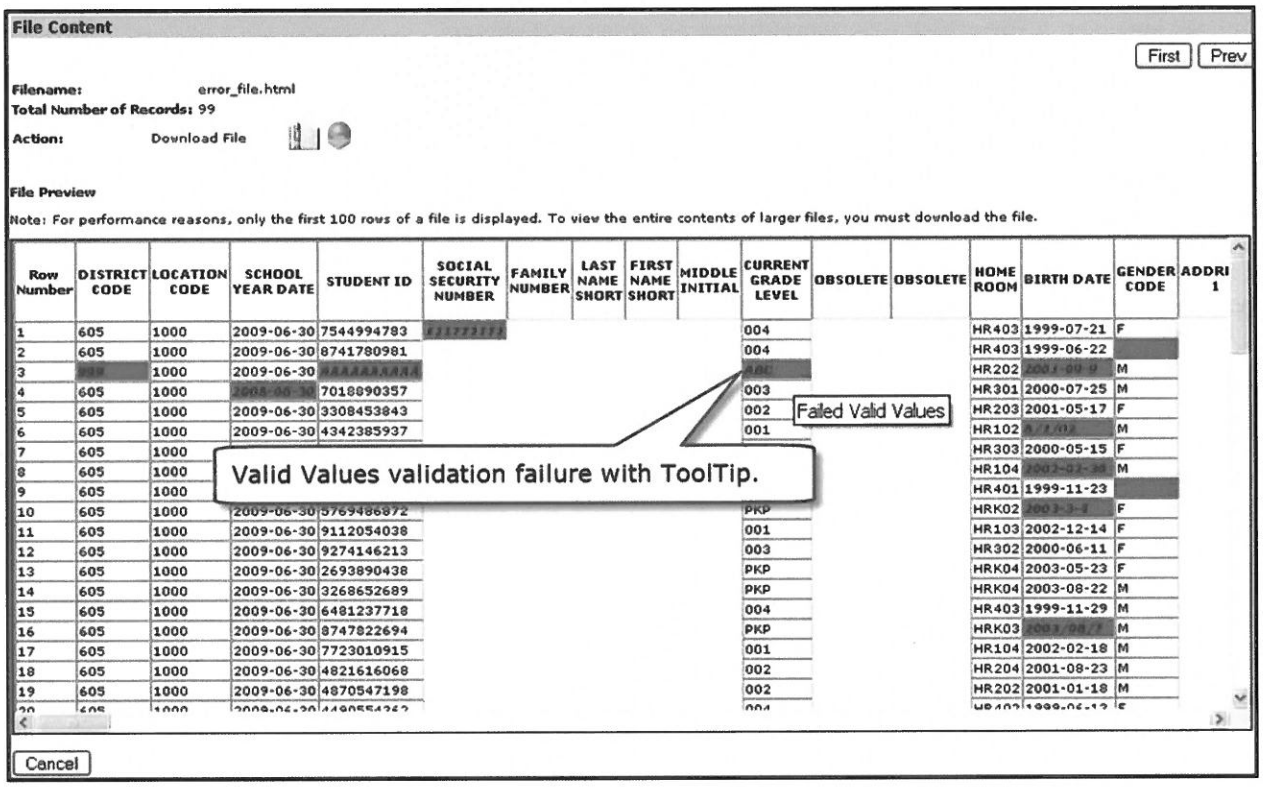


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Figure 4.4.1-9. eDM File Details - Pre-ETL Validation File Contents.
This tab displays the contents of the data file with any errors highlighted. Hovering the mouse over a highlighted error will display a description of the validation.

Files that pass this validation layer successfully can be manually or automatically sent through the ETL process. Packaged ETL routines extract data from delimited files, transform codes (Ethnic codes or Disability codes, for example) to descriptions, determine referential integrity, determine which data need to be inserted as new records, determine which existing records in the target table(s) need to be updated, and ultimately perform those inserts and updates. Any data issues are written to error logs organized by error type, which are then accessible to the appropriate data owner(s) via eDM. Again, eDM can be configured to notify, via

email, designated personnel as various events occur (data loaded successfully, data loaded with errors, etc.).In addition to the validation capabilities built into eScholar, our solution provides for IBM Cognos verification and validation reports. The purpose of the data verification reports is to validate the data loaded in the Staging Database upon ETL processing. Each verification report is based on a single eScholar template and runs against the data in the Staging Database. Summary reports enable WVDE to determine whether the correct number of records have been loaded by data categories such as LEA, School, Race, Gender, etc. Detailed reports enable WVDE to validate the quality and consistency of the data being loaded. Validation reports provide WVDE with the ability to detect data anomalies across multiple templates such as students without classes, teachers without classes, and classes without students.

For more detail regarding our solution, including the steps to load and validate the data within the SLDS, please refer to *Section 4.4.2.1, Solution*.

4.4.1.3 Encryption of Data

RFP Reference: Section 4.4. Qualifications and Experience, page, 27

4.4.1.3 Ensure that the DWRS solution sufficiently encrypts and protects data from their identification in the source database to potential analyses of those data (beginning to end).

The Deloitte/eScholar team understands the sensitive nature of the data that will be loaded into the SLDS. The student and staff-level data will contain personally identifying information in addition to likely sensitive details on students such as discipline incidents and special education details. Access to these data is subject to federal regulations such as FERPA, CIPA, and COPA and likely also to state regulations. The Deloitte/eScholar team understands that no medical related data will be loaded into the WVDE SLDS and thus HIPAA will not apply.

The Deloitte/eScholar team effectively implements high-quality security features that address user authentication and role-based authorization, encryption, and secure data transmission in our solution deployments. In addition we recommend that direct access to the database be limited to WVDE database administrators and that a formal data access and use policy be developed if it does not already exist.

Please see *Section 4.4.1.4 Role-Specific Access* for a discussion of data suppression or masking within reports.

The security and privacy features of our solution include:

- Role-based access to eScholar and Cognos
- Data encryption during data transmission
- Confirmation that the appropriate security and privacy protections are in place
- An optional vulnerability assessment to confirm the effectiveness of the existing security controls

4.4.1.3.a Protection of Data

RFP Reference: Section 4.4. Qualifications and Experience, page, 27

4.4.1.3 Ensure that the DWRS solution sufficiently encrypts and protects data from their identification in the source database to potential analyses of those data (beginning to end). Provide a detailed description of

- 4.4.1.3.a. how the proposed solution provides adequate protection of educational student and staff data while adhering to the various requirements of this RFP including, but not limited to those Acts listed in Section 4.2 (i.e., FERPA, COPA, and HIPAA)

Role-Based Access

The Deloitte/eScholar SLDS solution will protect the sensitive educational student and staff data while adhering to the requirements of the RFP, including the relevant federal and state regulations. A key aspect of this data protection is the solution's role-based access. Role-based access is an out-of-the-box feature of the eScholar solution. Only appropriate users can manage data submissions or view previously submitted data within eScholar Data Manager. Likewise, Deloitte will work with WVDE during the Requirements Definition phase of the project to define the necessary roles to control access to the SLDS reporting and analysis functionality and to the individual reports and the data available within the reports. In our experience, end-user roles are developed to restrict access to student and staff-level data and to reports that include sensitive data such as student discipline or special education details. In addition, LEA users are limited to only being able to view data for their LEA, school-level users are limited to data for their school, and teachers are limited to view data for students in their classes.

Security and Privacy Principles and Practices

Deloitte understands the importance of using IT standards and guidelines and is committed to providing a standard compliant solution for the SLDS. Our approach incorporates appropriate security and privacy principles and practices, including those necessary for COPA, CIPA and FERPA, into each phase of the systems development life cycle. The proposed solution integrates the various security requirements into a centralized and rationalized framework to help WVDE minimize the risk of data loss while also driving the necessary compliance activities. Deloitte uses a holistic approach based on WVDE's policies, appropriate federal/state laws, regulations and industry-leading practices to document, analyze, design, and implement the security solution. We start with the selection of business functions for evaluation and determine the corresponding information types for that function. We then select the security requirements from our Risk Framework established in the Requirements Definition phase. These requirements may require implementing one or more management, technical, and operational controls for the system function. The technical design for security and privacy of our proposed solution is based on the outcome of the technical controls from this analysis performed for each system function. The Deloitte Risk Framework provides a single source of applicable rationalized security and privacy controls that are derived after linking requirements, risk, controls, and test procedures to SLDS functions and operations. Our Requirements Library is the "heart" of the Security and Privacy framework and provides a common repository of authoritative requirements such as regulatory sources (IRS, FISMA [NIST 800-53 foundation]), industry standards (Payment Card Industry Data Security Standard – PCI DSS), common practices (Control Objectives for Information and Related Technology - COBIT, International Organization for Standardization - ISO, and Information Technology Infrastructure Library - ITIL), and internal sources (e.g., policies, contracts, etc.) that have been mapped to specific requirements and the overlap of requirements removed. It will be tailored for WVDE to include specific requirements from CIPA, FERPA, and COPA as mentioned in the RFP.

Deloitte's Security and Privacy Risk Framework has been used by more than 100 clients as an "accelerator" for regulatory risk and compliance management and includes:

- More than 120 authoritative sources currently in the Risk Framework tool set
- Four types of authoritative sources (common practice, industry, regulatory, internal)
- 18 risk families
- Approximately 5,000 individual requirements
- Approximately 300 rationalized requirements

Additional Security Provisions

In addition to the role-based access, the data within the solution will be encrypted in transmission (see *Section 4.4.1.3.b* below for more information). Furthermore, direct access to the SQL Server database will be limited to WVDE database administrators. The Deloitte/eScholar team also recommends that WVDE develop a data access and use policy, if one does not already exist, to govern the access and use of the SLDS data.

Vulnerability Assessment (optional service)

Due to the sensitive nature of the data that will be loaded into the SLDS, the Deloitte/eScholar team believes that a vulnerability assessment should be completed prior to go-live to confirm the effectiveness of the existing security controls present in the application and also to identify any security vulnerabilities that may be present. We recommend that WVDE complete this assessment since there are no specific requirements for it within the RFP. We have, however, included this as an optional service in our proposal in case WVDE would prefer for the Deloitte/eScholar team to perform this service. See *Section 4.4.1.8* for more information on this optional service.

4.4.1.3.b Encryption Techniques

RFP Reference: Section 4.4. Qualifications and Experience, page, 27

4.4.1.3 Ensure that the DWRS solution sufficiently encrypts and protects data from their identification in the source database to potential analyses of those data (beginning to end). Provide a detailed description of

- 4.4.1.3.b. the proposed solution's data-encryption techniques, and

The Deloitte/eScholar SLDS solution will support encryption of data via 128 bit Secure Sockets Layer (SSL) technology as the data are transmitted between client and server. This includes eScholar Data Manager and the IBM Cognos-based reporting application. File transfer communications will likewise use at least 128 bit encryption. We will use WVDE standards for digital certificate acquisition and management for the purposes of the SSL-based communication.

Source system data extracts will also be stored in an encrypted format (using a technology such as WinZip 128 or higher bit SSL encryption) in a secured network location. Encryption of data within the source systems is outside the scope of the Deloitte/eScholar SLDS solution.

4.4.1.3.c Successful Examples

RFP Reference: Section 4.4. Qualifications and Experience, page, 27

4.4.1.3 Ensure that the DWRS solution sufficiently encrypts and protects data from their identification in the source database to potential analyses of those data (beginning to end). Provide a detailed description of

- 4.4.1.3.c. successful examples from prior completed contracts, along with issues/shortcomings that had to be resolved in those contracts and the manner in which they were resolved.

All of the Deloitte/eScholar SLDS implementations have included comprehensive security features to protect the sensitive educational data. This includes role-based access, encryption of the data in transmission, and policies limiting direct access to the SLDS database. Many of our clients, including the Pennsylvania Department of Education, have also implemented formal policies to govern the use of the data.

To confirm that its SLDS is indeed secure, the Pennsylvania Department of Education went a step further by asking Deloitte to conduct a security assessment of its eScholar-based SLDS in late 2010. Deloitte's security assessment included:

Application security is built into eScholar's well-defined SDLC process. Prior to each release, vulnerability testing is conducted by WhiteHat Security, a leading independent provider of vulnerability assessment services. Any significant vulnerabilities are identified and mitigated prior to release.

- A technical vulnerability assessment using automated scanning tools in the test environment to identify potential vulnerabilities in the web applications, network, and database
- A current state assessment of the Department's security controls, policies, and procedures based on standards from the National Institute of Standards and Technology (NIST)

The assessment found no vulnerabilities associated with the eScholar SLDS applications that, if exploited, could result in "super-user" access or in web defacement, phishing attacks, or sensitive data disclosure. The current state assessment provided the Department with recommendations for enhanced controls, policies, and procedures to protect its SLDS data.

In summary, there have been no significant security-related issues/shortcomings in any of our implementations.

4.4.1.4 Role-Specific Access

RFP Reference: Section 4.4. Qualifications and Experience, page, 27

4.4.1.4 Allow for role specific access across all levels of the DWRS by providing

The Deloitte/eScholar SLDS solution provides for role-based access to the application components. The eScholar role-based access is a feature provided out-of-the box. Role-based access is also a core component of IBM Cognos, the proposed reporting tool. Deloitte will work with WVDE to define the roles that will control access to reporting functionality, specific reports, and data within Cognos reports.

Pennsylvania's SLDS provides fine-grained control to over 1,000 reports through role-based access for the approximately 2,500 users across 800 LEAs.

Another security and privacy component of our SLDS solution is the suppression or masking of data within reports. Our team understands FERPA and the need to protect SLDS education records from unauthorized disclosure through the use of statistical methods and data suppression within aggregate reports. We have implemented reports with these types of sophisticated techniques for the Pennsylvania Department of Education and other clients and look forward to applying our knowledge and expertise for WVDE.

4.4.1.4.a Steps for Role-specific Access

RFP Reference: Section 4.4. Qualifications and Experience, page, 27

4.4.1.4 Allow for role specific access across all levels of the DWRS by providing

- 4.4.1.4.a. a detailed explanation of the steps to ensure the proposed solution supports role-specific access

eScholar Role-Based Access

Role-based access is an out-of-the-box feature of the eScholar solution. The below roles are available within the eScholar Data Manager (eDM). Note that the District User, Multi-District User, and Superintendent roles are most likely not applicable to WVDE since data will be sourced directly from state-level sources rather than from the individual LEAs.

- **District User**. Role assigned to LEA-level Data Administrators. This role provides the ability to upload template files only for the LEA the user is associated with.
- **Multi-District User**. This role provides the same functionality as District User but allows the user to upload template files for multiple LEAs the user is associated with instead of just one.
- **Superintendent User**. This role is typically assigned to the individual with the authority to approve the data submissions within eDM. Approval of data submissions by this role is an optional feature within eDM.
- **State User**. This role is intended for State Administrators. In addition to being able to load template files for the state, a State User can perform a variety of administrative functions within eDM. This role also provides access to end-user functionality.
- **Super User**. A role reserved for System Administrators to manage the overall system configurations and settings. This role also provides access to end-user functionality.

- **Help Desk User**. A role intended for help desk staff. This role has read-only access to template files and batches submitted by any LEA.

Reporting Role-Based Access

In the Requirements Definition phase of the project Deloitte will work with WVDE to define the necessary roles to control access to the IBM Cognos-based reporting and analysis functionality and to the individual reports and the data available within the reports. In our experience, end-user roles are often developed to restrict access to reports by domain (e.g., student enrollment, program participation, assessment results, special education details, student discipline, staff, etc.). In addition, LEA users are limited to only being able to view data for their LEA, school-level users are limited to data for their school, and teachers are limited to view data for students in their classes.

SLDS Security Provider

A security provider, sometimes referred to as an Identity and Access Management (IAM) solution, is necessary to store information on the users who have access to an SLDS. This includes information such as the user name, password, LEA and school (if relevant) in addition to the role(s) the user is assigned to within the SLDS applications. In addition to user account management, a security provider is integrated with application components to determine that only authenticated users access the applications and that these users are authorized to the appropriate functionality/reports/databased on their role(s).

The Deloitte/eScholar team understands that WVDE does not have an existing across the board security provider that can be utilized with the SLDS. As such we propose to use security providers that are built into the eScholar and IBM Cognos products to effectively provide user account management and authentication and authorization services. This will require WVDE to separately manage SLDS user accounts in the eScholar and Cognos security providers. We believe this is a feasible solution since there will only be a few SEA level users of eScholar; the majority of the SLDS users will be users of the Cognos reports.

WVDE, however, may desire a more robust and integrated security solution for the future that can be utilized enterprise-wide. For example, WVDE may desire a solution that allows for decentralized user management so that each LEA can manage its own user accounts without the need for intervention from WVDE. For this reason Deloitte has included an optional service, described directly below, to work with WVDE to understand and document its long term security requirements and to provide potential options for a future security state.

Security Requirements and Options Analysis (optional service)

Should WVDE desire a more robust and integrated security solution that can be utilized by the SLDS as well as other WVDE applications, Deloitte can work with WVDE to understand the existing identify and access management processes and to determine the requirements and options for a future solution. The tasks associated with this optional service are described in the table below.

Task	Description
Assess the existing identity and access management processes.	Understand the existing structure and dynamics of WVDE into which the future user provisioning and access management security solution will be deployed.
Conduct two workshops to define and validate business needs.	Two facilitated requirements sessions will be held with WVDE staff to gather security requirements to understand stakeholder needs, priorities, and perspectives.
Define and document functional and technical requirements and use cases.	Define functional and technical requirements, detailed use cases and constraints, to be addressed by a future state security solution.
Conduct two workshops to discuss future state solution.	Transform the requirements specification into future state user provisioning and access management architecture options. The conceptual architecture defined will be high level to facilitate WVDE to choose the best option and hence will not constitute technical or process design elements.
Produce Security Options Deliverable.	This deliverable will describe the functional and technical security requirements, conceptual architecture, and future state implementation options for WVDE.

Figure 4.4.1-10. Security Requirements and Options Analysis tasks.
As an optional service, Deloitte can work with WVDE to define requirements and present options for a future security solution that can be utilized enterprise-wide.

4.4.1.4.b Masking of Data

RFP Reference: Section 4.4. Qualifications and Experience, page, 27

4.4.1.4 Allow for role specific access across all levels of the DWRS by providing

- 4.4.1.4.b. detailed information on the steps proposed in the solution to support the masking of data, while preserving database linkages, between the source database and any target databases that would be accepted in the DWRS.

The Deloitte/eScholar team understands that to be compliant with FERPA it is critical for WVDE to protect the SLDS education records from unauthorized disclosure and to protect individual students from identification in aggregate reports. Where appropriate, the Deloitte/eScholar team will implement small or "low N" cell suppression into reports to mask data so that an individual or individuals cannot be identified based on a combination of data points. An example of this is masking or suppressing the data in a report with assessment results that would otherwise show the performance for a low number of students in a rural LEA and for a certain racial category. Note that in addition to suppressing the value in the cell, sub-totals and totals within the report need to be suppressed so that the value cannot be deduced. Likewise, other reports the user has access to need to be reviewed to determine if a sub-total or total exists elsewhere that could be used to calculate the suppressed value.

This suppression will be developed using disclosure avoidance and other guidance from the U.S. Department of Education Privacy Technical Assistance Center (PTAC). The Deloitte/eScholar team has experience implementing industry practices to protect student privacy in SLDS aggregate reporting for clients like Pennsylvania and will bring this expertise to WVDE. Suppression requirements will be defined in the Requirements Definition phase of the project.

Commonwealth of Pennsylvania Department of Education (PDE)

State Fiscal Stabilization Fund (SFSF) – Report for Indicator (C)(11) by Local Education Agency (LEA)

School District / LEA	Subgroup	Subgroup Detail	High School Graduate Count	Postsecondary Enrollee Count	% of Graduates Enrolling in Postsecondary
Council Rock SD - 122092353	Disability Status	Disabled	74	40	54%
	Economically Disadvantaged Status	Yes	35	21	60%
	LEP / ELL Status	Current ELL	*	*	57%
		Former ELL	*	*	67%
		Never ELL	*	*	85%
	Race/Ethnicity	American Indian / Alaskan Native	*	*	*
		Asian / Pacific Islander	47	42	89%
		Black / African American (not Hispanic)	*	*	67%
		Hispanic (any race)	*	*	58%
		White / Caucasian (not Hispanic)	1014	868	86%
	Special Education Status	Has Current or Recent IEP	89	51	57%
		No IEP	997	875	88%
Council Rock SD - 122092353			1086	926	85%

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Figure 4.4.1-11. Sample Education Report using Suppression Techniques.
The Deloitte/eScholar team has experience with statistical methods for protecting personal identifiable information in aggregate reporting. This publicly available Pennsylvania Department of Education report, which was developed by Deloitte using IBM Cognos, includes complex suppression techniques.

4.4.1.5 Solution as Seamless Component

The Deloitte/eScholar team has extensive experience implementing SLDS in other states. Our proposed SLDS solution has been implemented in diverse environments with different database platforms, operating systems, network configurations and security applications. In most cases, our solution has also included integration with the state's single sign-on portal to provide a unified and seamless experience for the users. As desired by WVDE, we have also integrated with P20 systems and extracted data from assessment vendors and other SQL Server based systems.

This experience enables us to provide WVDE with guidance on the optimal hardware, software and network infrastructure. Our experience in installing and configuring the proposed software will enable us to complete the installation and configuration of the WV SLDS environment, which is critical to the timely implementation of the SLDS, in a short amount of time. In addition, it will also enable us to validate that our solution works seamlessly in the WVDE environment. Our knowledge of the privacy and security requirements from other states will also enable us to configure a secure solution that will help meet WVDE's security needs.

Deloitte will leverage our strong Technology practice which has extensive experience integrating applications and solutions within an enterprise to provide a seamless transition. Our Technology practice has a dedicated service line focused on Architecture and Infrastructure - Platform Architecture and Infrastructure.

The Platform Architecture and Infrastructure Service line (PA&I) provides a structured and repeatable mechanism to integrate business strategy and requirements with technology-based solutions to create increased value to the enterprise. PA&I is focused on solving the toughest IT architecture and infrastructure problems for our clients around three key capabilities: IT Service Management, Internetworking and Data Center. We will be able to use this service line's expertise to solve any issues we may encounter while implementing the solution.

The expertise that we bring to WVDE in the areas listed above significantly reduces the risk of major implementation delays, security breaches, integration issues and need for unnecessary workarounds to make the solution work seamlessly in WVDE's environment.

4.4.1.5.a How Solution functions with Privately Addressed Network

RFP Reference: Section 4.4. Qualifications and Experience, page, 27-28

4.4.1.5 For the successful Vendor's solution to function as a seamless component of West Virginia's educational network and public Internet as appropriate.

- 4.4.1.5.a. Provide detailed narrative of how the proposed solution functions within a privately addressed network. The narrative should include (at a minimum) specific details around (1) any IP translation issues that may need to be addressed by the WVDE prior to implementation; (2) firewall considerations; (3) a comprehensive list of all ports required for every component of the Vendor's proposed solution; and (4) encryption details.

As indicated above, our solution has successfully been implemented seamlessly in diverse environments including both privately and publicly addressed networks. The following section describes how our solution will function in a privately addressed network:

1. **The IP translation issues** would only occur from the outside of the privately addressed network into the load balancer. This would also only be needed if WVDE decides that the application should be available from outside of the internal network.

2. **Firewall considerations –** our team's experience suggests that there be no firewall between the application server and the database server. We have found that this can cause performance issues when loading data.
3. **There are three classes of servers that are needed for our installation -** Web/Front End, Application/ETL and Database/Backend. Depending on the installation, there may be one or more of each of these servers. Web servers will need TCP port 443 available with an SSL Certificate installed for the web application. It is recommended to use a load balancer to handle the web traffic to the web servers over 443 with a valid SSL certificate. We will also need TCP 61616 and 62626 opened for communication with the application servers. The application servers will need to have TCP port 6161 and 62626 opened. The database server will need TCP ports 61616 and 62626 and 1433 (SQL Server).
4. **Encryption details –** eScholar supports database encryption. All communication to the web servers are recommended to be done using SSL encryption. At this time the eScholar application does not support encrypted communication between the web server and the application server for messaging.

4.4.1.5.b Installation and Contingency Plans

RFP Reference: Section 4.4. Qualifications and Experience, page, 28

4.4.1.5 For the successful Vendor' s solution to function as a seam less component of West Virginia ' s educational network and public Internet as appropriate.

- 4.4.1.5.b. Provide detailed narrative that describes the installation and contingency plans, and timeline for installation of the DWRS.

Our work plan includes two months of elapsed time at the beginning of the project for installation and configuration of the hardware and COTS software components in the Development/Testing/Training environment. It will be critical to the success of the project to have the Development/Testing/Training environment up and running within two months to avoid any potential delays in the delivery of the SLDS solution and we believe this allotted time frame is reasonable. The Production environment will need to be setup and configured by month 7 of the project.

We have not factored any contingency plans for the installation in our work plan. The timely installation of the hardware is critical for the successful implementation of the SLDS solution within time and budget. Due to the nature of this risk, our project management team will be working very closely with WVDE to proactively monitor the progress of the hardware procurement process, which often is the most time consuming aspect.

The Deloitte/eScholar team will provide assistance with the installation and configuration of the eScholar products and the IBM Cognos products once the hardware has been procured. We have helped a number of our SEA clients with the installation and configuration of these products. WVDE will be responsible for installing and configuring the Microsoft SQL Server products. It is our understanding that the hardware will be hosted in WVDE's hosting facility.

4.4.1.5.c Internet Accessibility

RFP Reference: Section 4.4. Qualifications and Experience, page, 28

4.4.1.5 For the successful Vendor' s solution to function as a seam less component of West Virginia ' s educational network and public Internet as appropriate.

- 4.4.1.5.c. Provide detailed narrative of considerations when the Vendor's proposed solution is accessed via the public Internet. The narrative should address (at a minimum) (I) risks associated with public Internet access; (2) how the Vendor will adhere to user-access roles, privacy requirements, and suppression rules throughout public report development; and (3) encryption details.

Risks Associated with Public Internet Access

Exposing any data-centric application such as the SLDS to the Public Internet has significant potential risks. The major risk includes inadvertent exposure of sensitive student and staff data including PII fields such as First Name, Last Name, SSN, Address, etc. due to a data breach by a hacker. The data could be used by potential hackers for identify theft or exploitation. Another potential risk is providing a valid system user with access to more information than they should see. Any such events may impact WVDE's reputation and cause end-users and other stakeholders to lose confidence in the system.

We have selected proven COTS products with robust security features as part of our SLDS solution. Both the eScholar products as well as the IBM Cognos products will be using authentication features, role based security, and encrypted communications. Information that the user is not allowed to see will be suppressed. We have worked with other SEAs to integrate these applications with their single sign-on portals and a wide variety of identity and access management solutions.

The Cognos reports will further have role based row-level and subject area level security to further limit the data a user can see. Additionally, Cognos has a built-in Firewall to prevent any unauthorized access. Examples of some of the additional measures we have taken around reporting at other SEAs include the following:

- Masking sensitive fields
- Only including PII fields on the reports if it is absolutely necessary
- Suppressing data for low N values on a report where students/staff belonging to a particular cohort cannot be uniquely identified by the report end user

The Microsoft SQL Server built-in security features including user names and passwords will be utilized to prevent any direct access to the SLDS database and Staging database from within or outside the WVDE network.

These measures will help WDVE minimize any such exposure or risks associated with the SLDS solution being public facing through the Internet. We will work with WVDE to define the security requirements for the SLDS during the requirements and design phases.

User-Access Roles, Privacy Requirements, and Suppression Rules in Public Report Development

The use of user-access roles, suppression and adhering to the privacy requirements is a critical part of our solution. Please refer to *Sections 4.4.3.1.d* and *4.4.3.1.e* for more information.

Encryption details

The Deloitte/eScholar SLDS solution will support encryption of data via 128 bit Secure Sockets Layer (SSL) technology as the data are transmitted between client and server. This includes the eScholar Data Manager and the reporting applications. Please refer to *Sections 4.4.1.3.b* and *4.4.3.1.e* for more information.

4.4.1.6 Load Balancing and Automated Upgrades

RFP Reference: Section 4.4. Qualifications and Experience, page, 28

4.4.1.6 For the successful Vendor to provide a DWRS that appropriately load-balances heavy system use and uses automated upgrades. Provide detailed narratives on how the Vendor proposes to implement a system that uses automated upgrades of Operating Systems, software, and database components. Describe the process including planning, implementation, verification, and evaluation.

Based on our experience at other SEAs and the expected number of users in West Virginia, we are proposing to strike a balance between performance and availability on the one hand and reasonable costs on the other hand, and, as a result we do not propose to provide for load balancing.

The load balancing and automated upgrade details for eScholar and IBM products are provided below.

eScholar Products

The eScholar Software Suite does support automated upgrades to the operating system as showcased by the number of customers running eScholar in diverse operating systems, software and databases. eScholar also supports load balancing if it is deemed necessary in the future.

IBM Cognos

Load Balancing

While we do not anticipated having to load balance the IBM Cognos servers, Cognos does supports load balancing, should the need ever arise for WVDE.

Load balancing spreads tasks among available processors. It is important in any system, and is a key to processing capacity and scalability. In IBM Cognos BI, load balancing means ensuring that processing requests are distributed appropriately among the available IBM Cognos BI servers. IBM Cognos BI does this automatically, but it can be configured and customized as well.

Automatic Load Balancing

In a distributed environment, IBM Cognos BI balances request load automatically. By default, as servers are added to the system, each server dispatcher processes the same number of requests. If there is more than one instance of a given service, the dispatcher distributes requests to the enabled instances of the service that are registered in Content Manager.

Configuring Load Balancing

While automatic load balancing may be appropriate when hardware resources are identical throughout a server topology, it may not be ideal in environments containing a mix of hardware resources with different capacity characteristics. In a hardware environment that contains servers with varying degrees of processing capacity, it is desirable to balance the processing load according the server's capacity.

In IBM Cognos BI, one can set process capacity settings using server administration options. For example, if there are two servers, one of which has twice the capacity of the other, one might assign the more powerful server a weight of two and the less powerful server a weight of one. IBM Cognos BI then submits twice as many requests to the more powerful server.

Automated Upgrades

Due to its wide customer base for Cognos, IBM supports a variety of operating systems software and databases. IBM internally tests the compatibility of its Cognos product suite with the latest versions of operating systems software and databases and may issue a product upgrade if necessary. IBM appropriately communicates the compatibility of its products with the different software.

Deloitte's recommendation towards automated upgrades is to always test the new product upgrade in the development environment and perform thorough regression testing. The higher environments can then be upgraded upon successfully testing the upgrade in the development environment. It is best to avoid installing any beta product upgrades.

4.4.1.7 Robust Software & Software Problem Resolution

RFP Reference: Section 4.4. Qualifications and Experience, page, 28

4.4.1.7 For the successful Vendor to provide its robust software and its software problem resolution plan. The specifications associated with this objective include:

Our solution has supported state education agencies with over 1.8 million students, over 800 LEAs, and over 2,500 Cognos users. We are confident that our proposed solution, architecture and hardware specifications will support WVDE's needs for processing simultaneous secure requests from multiple locations and will mitigate any performance degradation issues.

Our proposed solution includes COTS components from eScholar and IBM. Each COTS component is supported by a comprehensive testing, maintenance and software bug resolution plan provided by the vendor. eScholar and IBM conduct extensive unit, performance, load, security and integration testing in their respective testing labs before releasing updates to their products. Each also has a support team, a knowledge center for easy access to documentation, and a documented service level agreement including an escalation process. Both eScholar and IBM pride themselves on producing high quality software and Deloitte has the ability to escalate issues for resolution should the need arise.

- IBM Cognos is a best-of-breed business intelligence tool that can support WVDE's needs for secure authentication and a geographically dispersed user base.
- During the project Deloitte serves as the single point of contact and is ultimately responsible for the completion of the work
- eScholar and IBM Cognos provide comprehensive support, during the project and post-implementation.

4.4.1.7.a Proposed Reporting Tool - Secure Authentication

RFP Reference: Section 4.4. Qualifications and Experience, page, 28

4.4.1.7 For the successful Vendor to provide its robust software and its software problem resolution plan. The specifications associated with this objective include:

- 4.4.1.7.a. how the proposed reporting tool can handle simultaneous secure authentication from various locations across the state and quantify estimated performance degradation;

IBM Cognos software security is designed to meet the need for security in different environments. It can be used in everything from a proof of concept application where security is rarely enabled to a large-scale highly secure enterprise deployment. For the WVDE SLDS, the Deloitte/eScholar team will use the security provider built into Cognos to effectively provide user account management and authentication and authorization.

Cognos can effectively handle simultaneous secure authentication requests from various locations based on our extensive experience working with Cognos with other state education agencies and numerous other public and private sector clients.

There are a number of factors associated with performance degradation making it difficult to quantify. It depends upon the hardware used, hardware configuration and load balancing, operating system, the number of users using the reporting tool concurrently, network traffic, etc. The hardware specifications and

configuration can be modified as necessary in an attempt to achieve the desired outcomes based on the expected number of users.

4.4.1.7.b Proposed Support Structure

RFP Reference: Section 4.4. Qualifications and Experience, page, 28

4.4.1.7 For the successful Vendor to provide its robust software and its software problem resolution plan. The specifications associated with this objective include:

- 4.4.1.7.b. a detailed narrative of the Vendor's proposed support structure for software development and implementation issues. The narrative should address the levels of software failure and escalation path for issues from identification to resolution; and a proposed plan regarding software issues for issue identification, issue ownership, and issue resolution during development, implementation, and transition to WVDE operation of the DWRS.

The Deloitte/eScholar team will provide WVDE with a support structure, both during the course of the project and post-implementation. During the project Deloitte serves as the single point of contact and is ultimately responsible for working with WVDE, eScholar, IBM and others to resolve issues as they arise. Deloitte is also responsible for the successful completion of deliverables. At the conclusion of the implementation and the expiration of the professional services contract, responsibility for the operation of the SLDS will transition from the Deloitte/eScholar team to WVDE. Although the SLDS will have been transitioned to WVDE, continued post-implementation support is available for our SLDS solution through eScholar and IBM.

For a discussion of our issue tracking and resolution process please see *Section 4.4.5 Goal V: Project Management* of this proposal. In addition, please see *Section 4.4.6 Goal VI: Transition Strategy* for a detailed description of the proposed transition plan.

Deloitte is the Single Point of Contact, Throughout the SLDS Development and Implementation

As the prime contractor for the WVDE SLDS project, Deloitte accepts accountability for owning and facilitating the resolution of issues throughout the course of the project as well as the successful completion of proposed deliverables. We maintain a "Single Point of Contact" philosophy in which we assume accountability for the aspects of the work, whether performed by employees or subcontractor personnel. WVDE does not have to assume responsibility for resolving issues with a subcontractor. Our approach provides each team member with a clear understanding of the project objectives, assignments, schedules, quality, and standards. Detailed tracking of project tasks combined with a structured set of quality assurance review procedures allow for early detection and correction of deficiencies. This synchronized approach to accountability helps each member advance toward the common goals and objectives of WVDE.

eScholar Support, During the Project and Post-Implementation

eScholar deems customer satisfaction of utmost importance and provides an eScholar Account Manager that acts as single point of contact at eScholar to determine a successful implementation.

eScholar solicits continuous feedback from its clients and encourages participation in eScholar Roundtables and Advisory Committee events and surveys its customers at least once a year to measure customer satisfaction as well as product performance. The large community of satisfied eScholar customers helps the company guide product development and provides advice and guidance to other customers that may be implementing eScholar capabilities that others have done before.

The remaining sub-sections describe the support that eScholar provides, both during the project and post-implementation.

Online Support

eScholar can also be reached for standard technical support by phone 13 hours a day, 5 days a week, email or via our Web-based support site where access is provided 24 hours a day, 7 days a week.

eScholar's Web-based support site not only provides the ability to open and track support tickets but is integrated to our Knowledge Base. The eScholar Knowledge Base provides access to the full catalog of product documentation replete with User and Administrator manuals. Additionally, a catalog of video casts is also available to WVDE.

Software Maintenance

eScholar support is comprehensive and each year of paid support includes software maintenance, bug fixes, software updates, and platform support. Just a few examples of this include: support for new releases of operating systems, support for new releases of a DBMS such as Microsoft SQL Server 2012, and support for virtualization.

General Release Enhancements

General release enhancements are typically the result of guidance provided directly from our customers, changes to federal requirements and guidance from Standards organizations like NEDM, NCES and CEDS. The online support site mentioned above, also gives our customers the ability to log feature requests that evolve into general release enhancements for eScholar products. An Advisory Board, comprised of our customers, reviews the requests and provides feedback on relative importance and urgency to help set the scope.

Examples of enhancements in previous releases:

- New functionality
- Performance
- Ease of use
- Ease of maintenance
- System administration
- Interoperability (e.g. web services)
- Support for new data standards (e.g., NCES)
- Integrated, context sensitive help
- Support for accessibility standards (508 compliance)
- Support for evolving Federal requirements (e.g., race/ethnicity)

EDEN/EDFacts Reporting Support

Since the EDEN/EDFacts file specifications are subject to change from year to year, eScholar reviews the file specifications each year and applies updates to the eScholar EDEN/EDFacts submission processes to stay in compliance with changing requirements from the United States Department of Education (USED). Table definitions within the eScholar EDEN data mart are updated as required to support changes in the EDEN file specifications issued by USED. eScholar publishes an updated eScholar EDEN/EDFacts User Guide as required to map the eScholar CDW data elements to the EDEN/EDFacts requirements. The business rules built into its EDEN/EDFacts file submission solution are updated to stay in compliance with changing requirements. Finally, eScholar provides detailed documentation and procedures to implement the upgrades as required.

These eScholar updates are provided as part of the regular maintenance and support contract for the eScholar EDEN/EDFacts solution.

Support and Escalation Procedures

Upon initiation of a support request, either by phone call, email or one that is logged directly to the support portal, a customer will receive a confirmation notice. Once the incident is logged and an incident number is communicated to the customer, they have the ability to track the status of the support ticket. The incident number is a confirmation that the issue has been received, logged and assigned to a work group.

Tickets will be prioritized by severity and urgency. eScholar together with the customer determine the appropriate severity and priority.

eScholar is responsible for determining what characterizes a single support incident and communicating this to our customers. eScholar will make reasonable efforts to resolve the issue but we cannot guarantee that every issue will be resolved to the customer's satisfaction.

Possible resolutions include:

- eScholar provides a solution to the incident
- eScholar provides a reasonable workaround to the incident
- eScholar determines the incident is related an action that does not follow a published guideline or specification
- eScholar determines the incident is an enhancement request
- eScholar determines the issue is a software defect

The table below describes the severity levels assigned to a support request. Response Time indicates the time elapsed between the time the eScholar Support Desk receives the ticket and has communicated receipt, issue number, and severity to customer.

Severity	Description	Response Time
Critical/Severity 1 (P1)	• Unplanned system outage/application unavailable	4 hours
High/Severity 2 (P2)	• Bug with specific application functionality • Trapped or un-trapped error	12 hours
Medium/Severity 3 (P3)	• Application functioning, but not as desired/expected	Within 48 hours
Low/Severity 4 (P4)	• Enhancement request • Question on functionality • Display/formatting issues	Within 48 hours

*Extended support packages purchased by customer may supersede these response times.

Figure 4.4.1-12. Severity Levels.

Additional support package options are available; we are interested in better understanding of WVDE's needs.

We encourage WVDE to speak with some of eScholar's long-time customers to understand the scope and effectiveness of the support we provide. We are confident that you will hear a positive story.

IBM Cognos Support, During the Project and Post-Implementation

IBM's software support organization is a global network of centers with expertise across our broad product portfolio. The organization is made up of teams of individuals that work together to provide you with the responsive software support that you require. Our worldwide centers are structured to provide you with local language access in most major countries and with the skills to help you identify the source of your problem amongst the products for which you have purchased support. For complex problems, we have specialized, skilled product teams with access to the experts in our Development Laboratories, as required. Therefore, you have access to the right level of IBM expertise when you need it — no matter where you are located.

The people of our software support organizations are highly skilled, motivated, energetic, and are eager to solve your software problems or answer your questions. Our goal is to determine your satisfaction each time you need to call on us for support by:

- Responding to your calls within targeted guidelines
- Providing ongoing communication regarding your problem status through problem resolution
- Taking ownership of your call for support
- Providing a defined escalation process when management assistance is needed
- Maintaining our commitment to continuous improvement of our service processes

Software Support is provided through responsive telephone and electronic support from IBM worldwide support centers that maximize customer's software investments. Access to support specialists in IBM Support centers worldwide is available 7x24 in the country's local language. The first year of support is included in IBM's software license price. For out years, support and product upgrade protection is purchased together annually. There are two levels of software support, general self-help and premium support.

General Self-Help Support

All IBM customers are entitled to take advantage of the Self-Help services available at http://www.ibm.com/software/support. We offer a vast range of online service offerings designed to augment and enhance the value of your IT operation. With these resources and tools, our self-help software support Internet site will meet many of your support needs. Self Help will be available for at least one year from when you acquire your product from IBM. General Self-help capabilities include features like:

- Basic search capability for software defects (e.g., closed Authorized Program Analysis Reports), software fixes, and tech notes for resolved issues
- Information on how to purchase software support
- Marketing Information, such as product overviews, newsletters, RedBooks, White Papers, and Announcement Letters
- Technical information, such as RedBooks and White Papers
- Links to education and training information

Premium Support

Premium Support offerings are services that provide both additional and specialized support. Premium Support offerings focus on the vertical depth of support, and feature a personalized relationship with our technical experts, on-site assistance and knowledge transfers as well as horizontal breadth for multi-product and multi-vendor IT environments to maximize IT infrastructure availability. With Premium Support, you receive the following:

- Proactive problem prevention and knowledge transfer
- Situation management and reporting
- Escalations
- Account management
- Assigned technical analyst
- Optional or planned on-site days
- Emergency on-site days
- Remote technical advice hours
- Event-specific after-hours support for all severities

Escalation Procedures

IBM has checks and balances in place to automatically escalate if progress towards the resolution of a problem is too slow. While rarely needed, customers may also request an escalation. Escalation typically consists of raising the awareness level of an open issue or problem to a higher level of management and/or technical area. Escalation may also include the assignment of additional resources to effect resolution. Depending on the reason for the escalation, the IBM Project Executive may choose to bypass the next level of management and go directly to a higher contact, or to contact two or more levels simultaneously.

Therefore, the escalation process does not always occur in exactly the same manner, but instead occurs in the manner designed to alleviate the customer's concern.

IBM's problem management system has procedures in place to monitor the progress made on trouble reports and the success of escalations. Problems that have been assigned Severity Level 1 which have not been resolved within the time period agreed upon by our customer and IBM will be escalated automatically. These critical business problems are escalated using a process known as SEV1 Alerts. Problem severity levels and the criteria for their assignment and escalation are established as part of IBM's problem management process. The progress made on problems with lower severity levels (2, 3 and 4) will be monitored using this problem management process. If a satisfactory resolution does not occur within the specified time period, a higher severity level may be assigned. IBM will work with our customers to agree on the guidelines to be used for handling various problem situations. This includes criteria for escalation, customer notification of escalation and team assignments for problem resolution.

The table below describes the severity levels assigned to a support request. Response time is measured from the time you raise an issue with IBM Support, to the time an IBM Support Analyst is assigned to the issue and acknowledges such assignment by initiating return contact.

Severity	Description	Response Goal
1	Critical business impact	Within two hours
2	Significant business impact	Within two business hours
3	Some business impact	Within two business hours
4	Minimal business impact	Within two business hours

Figure 4.4.1-13. Support Request Severity Levels.

4.4.1.8 Patches and Fixes

RFP Reference: Section 4.4. Project Goals, page, 28

4.4.1.8 Describe the schedule of patches and fixes, and the proposed plan to test components of the DWRS to ensure successful design, development, implementation, and transition to WVDE operation of the DWRS.

This section addresses the Deloitte/eScholar team's comprehensive approach to testing of the SLDS to determine successful, design, development, implementation, and transition of the system to WVDE. Deloitte's Enterprise Value Delivery for Information Management Testing Methodology has been proven and executed for hundreds of system implementations at public and private sector clients. Our team's specific expertise has been refined over the course of eight similar SLDS implementations.

Following the description of testing immediately below we provide a discussion of the quality built into eScholar products through a well-defined and time-tested Software Development Life Cycle (SDLC). Finally, due to the sensitive nature of the educational data to be included in the SLDS, and the importance of keeping these data secure, we recommend that a vulnerability assessment be completed prior to go-live. Should WVDE desire for the Deloitte/eScholar team to complete this assessment, the scope of these services is described here.

Our robust testing methodology verifies the system functionality during each phase of the testing.

Quality is built into eScholar products through a well-defined SDLC process.

A vulnerability assessment can be performed to confirm there are no security vulnerabilities prior to go-live.

Please see *Section 4.4.1.7, Software Problem Resolution* for a detailed description of support provided by eScholar and IBM, including software maintenance (e.g., patches and fixes) and enhancements. Please also see *Section 4.4.6, Goal VI: Transition Strategy* for a detailed description of the proposed transition plan.

Testing

Our testing approach utilizes COTS testing techniques to achieve thorough, accurate results. The Deloitte/eScholar team will lead testing activities, with input from WVDE except for user acceptance testing which will be performed by WVDE.

Upon project initiation we will work with WVDE to define a System and Acceptance Test Plan in a timely manner. This plan will address the test entry and exit criteria, definitions and processes. Test results and test cases will be documented and submitted to WVDE for approval upon the completion of testing.

Our SLDS testing methodology has been refined through eight similar SLDS implementations.

Components to be Tested

The System and Acceptance Test Plan will outline testing around five major components:

- **eScholar Data Manager (eDM) and Extract Testing** – This testing will confirm that eDM is configured and working correctly. A major component of confirming eDM is loading the warehouse correctly is testing the extracts that are developed by WVDE. Each extract will be run through eDM and loaded into the Staging Database. Feedback will be provided to WVDE regarding formatting and data errors. This testing

typically starts after eDM is installed and configured in Staging and runs through source system extract development with testing performed on extracts as they are finished. As this testing uses actual source system extracts, no dummy data is required. This testing is vital, as the data loaded during the extract testing provides the baseline data for almost all other areas of testing. By using real data for extract testing we will also be able to test the performance of the data loading process and performance of reports.

- **IBM Cognos Framework Testing** – This testing will validate that the semantic layer developed for the reporting functions correctly and returns data as expected. The semantic layer is unit tested as it is developed, then further system testing is performed once development is complete. For the semantic layer to be tested, extracts need to be loaded for each area tested as part of the eDM and Extract Testing.
- **Security Integration Testing** – This testing will validate that SLDS application components are properly integrated with the security providers, providing appropriately authenticated and authorized SLDS users. This testing is performed after eDM and the reporting tool are integrated with the security providers User accounts will be provided by WVDE for use in testing of this integration.
- **Report Security Testing** – This testing will validate that security roles and privileges work correctly inside IBM Cognos and that data are restricted as intended. Report security is tested after the completion of the reporting semantic layer. For the report security to be tested, extracts need to be loaded for each area tested as part of the eDM and Extract Testing.
- **Report Testing** – This testing will validate that the reports function as intended. This includes verifying that each report runs with the appropriate parameters, the appropriate data are present on the report, the presentation of the data is correct, and data are suppressed or masked as appropriate. This testing will further test the Cognos semantic layer.

Within each of the testing components, a standard mechanism for tracking and reporting test plans, test scripts/scenarios, test results, issues, and their resolution will be established with input from WVDE and documented in the System and Acceptance Test Plan. Final timelines will be developed with input from WVDE and documented in the System and Acceptance Test Plan. As noted above, eDM and Extract Testing is the most critical aspect of testing, as it is a prerequisite for other testing with the exception of Security Integration testing. As such, it will have the highest priority in the timeline.

Testing Activities

The testing activities will include the following:

- **Unit Testing** – During the development of the reporting semantic layer and security integration, sections of each will be unit tested as they are completed. During unit testing, the developer will test the functionality of the particular component they are developing to confirm basic functionality is working as intended. This provides a base level of testing before the pieces are assembled and tested as a working whole. If a software discrepancy is identified during the unit testing, steps are taken to document, resolve, and retest the "unit" until expected results are achieved. Once expected unit test results and acceptance criteria are met, the individual software "units" or groups of related units are ready for System Testing.
- **System Testing –** System Testing examines the overall functionality of an application or workflow. The System Test effort focuses on verifying the interfaces of discrete applications interacting with the SLDS as well as inter-module functionality, and finally, the accuracy and validity of the data validation reports. It is

important to note that the extent of the System Testing effort grows as more "units" are introduced, tested, and approved.

- **User Acceptance Testing (UAT) –** User Acceptance Testing (UAT) focuses on validating that the functionality that passed Unit and System testing will perform correctly when subjected to user perspectives. UAT focuses on validating end-to-end business scenarios that are critical to the successful completion of the business process. This is the first testing phase in which end-users (subject matter experts) are introduced to validate business, policy, functional, and usability requirements. The success and quality of the final deployment depends on the extent and thoroughness of UAT.

  The overall management of the UAT effort is a critical component of the testing effort. Deloitte will work closely with the appropriate end-users and stakeholders to provide support for the UAT effort. As part of preparing for UAT, we will provide high-level SLDS orientation training for the UAT testers.

  It is important to note that no changes will be made to the accepted requirements at this stage. Any such modification during this phase will be considered to be outside of the accepted scope of work and will be resolved by the Deloitte/eScholar team and WVDE through the established change control process.

  When a test script is successfully run and meets the associated specifications, it will be considered complete. Following this process, when the identified test scripts are passed, the User Acceptance Test of the system will be considered complete. Given this rigorous testing process and the aggressive schedule, it is also assumed that the Deloitte/eScholar team will have the full commitment and dedication of required WVDE user community team members to complete this task within time allocated in the project work plan.

eScholar Product Quality

At the heart of our proposed SLDS solution is the eScholar Complete Data Warehouse (CDW) and associated applications including eScholar Data Manager. The eScholar CDW product is the most widely used COTS solution in the marketplace today for gathering and managing PK-12 and postsecondary educational data. eScholar utilizes a well-defined SDLC, which they have used for more than thirteen years, that provides for the production of a high quality software product. At the completion of each phase in the eScholar SDLC process, the team evaluates and confirms that the goals and requirements for the phase have been successfully completed. In the event an issue occurs or a requirement is not met completely, the team reviews the issue and plans and executes a solution to the issue.

The SLDC process for the eScholar CDW includes the following steps:

1. Product Review and Planning	
Purpose	The goals of the Product Review and Planning phase are to review and plan product and technical strategies; to review and update existing plans such as the Testing Plan, Security Plan, and Development Plan based upon current needs; and to review and define risks associated with the product.
Description	During the product review and planning step, eScholar obtains general client feedback via client visits, surveys, and e-mail; evaluates implementation success; reviews and updates the product roadmap and strategies; and drafts an initial planning document for the next release. This process and documentation defines goals, risks, milestones, processes, and other release-specific information. The product team identifies areas for improvement in the product and processes and then plans for including those improvements in future releases.
2. Requirements Gathering	
Purpose	The goals of the Requirements Gathering phase are to clearly define business, functional, technical and other requirements; to generate and finalize requirements and specifications; and to estimate the level of effort needed to meet the requirements.
Description	During the requirements gathering step, eScholar obtains and clarifies client enhancement requests and combines them with eScholar's product team's proposed enhancements. For each client enhancement request, the clients describe the problem they are trying to solve and the priority of the enhancement. All of the prioritized requests from clients are reviewed and clarified to determining the targeted feature set. Communication with the clients remains open during this step.
3. Design	
Purpose	The goals of the Design phase are to clearly document database, implementation, interface, and component changes and processes; to conduct preliminary and critical design reviews; and to obtain detailed client feedback on their priority enhancement requests.
Description	During the design step, eScholar performs both internal and client-based design sessions. This is performed for each new feature to be included in the release. Clients may be provided with feature specification documents for their requested features as necessary. Additionally, test planning begins and the release plan is finalized which includes the in-scope features and project timelines.
4. Development	
Purpose	The goals of the Development phase are to build the in-scope functionality as described in the respective design documents; to achieve requirements defined in the specification; and to achieve development leading practices.
Description	During this step, the approved list of enhancements and the design documents are reviewed by the product development team and coded to the specifications. The development team performs unit testing for each new feature. As development is in progress, the quality assurance team is developing test scripts for the new enhancements and updating existing scripts as necessary.
5. Quality Assurance and Testing	
Purpose	The goals of the Quality Assurance and Testing phase are to finalize and conduct testing scripts; to maintain and monitor testing outcomes and requirements using a matrix; to report and verify application defects; and to certify the release.
Description	Once the enhancements have been developed, the application is reviewed and tested by the quality assurance team based upon the Testing Plan and test scripts. The software is evaluated and tested in three quality assurance cycles. Each cycle includes functional testing, regression testing, system testing, integration testing, and performance testing. Outcomes for each test are documented and maintained by the eScholar Quality Assurance team. Bugs are identified during this process, resolved, and verified. Prior to a release the eScholar Quality Assurance team must provide sign-off approval.
6. Documentation	
Purpose	The goals of the Documentation phase are to review and update documentation provided to clients, including the User Guide, Administrator Guide and Installation Manual; to provide a pre-release overview to clients; and to update marketing and other related materials.
Description	During the pre-release overview, clients typically receive a demonstration of the major new features and have an opportunity to ask questions about the features.

7. Packaging and Release	
Purpose	The goals of the Packaging and Release phase are to package and release installation files, documentation, and other necessary items; to offer upgrade and operations assistance to clients for the upgrade; and to generate a press release.
Description	The software and documentation are bundled and placed on the FTP server for each client to download. Once the product has been released via eScholar's FTP site, clients schedule and perform their upgrades based upon their implementation plans. This typically includes a testing environment installation/upgrade, installation, functional, regression, and performance testing in the testing environment, and documentation updates. Once the testing environment has been validated and tested, the production environment is upgraded and necessary testing is conducted. With some exceptions, upgrades and installations can be completed independently by clients with technical and operational assistance from eScholar as needed.

Figure 4.4.1-14. SLDC process for the eScholar CDW.

Throughout the product life cycle process the eScholar Product Manager is responsible for managing risks, schedules, requirements and outcomes for a product release. There is an approval gate between each step to confirm that tasks and expected results are completed prior to moving to the next step. All features and requirements are verified and approved by the Product Manager and Quality Assurance team prior to release. This SDLC process allows eScholar to deliver a product that is well-tested, proven, and is of the highest quality.

Vulnerability Assessment (optional service)

In addition to the testing described above, as an optional service to WVDE, Deloitte can perform a controlled vulnerability assessment of the SLDS. Assessment activities are performed to understand the effectiveness of the existing security controls present in the application and also to identify any potential security vulnerabilities that may be present.

This testing is performed from a "black box" perspective wherein the tester does not have authenticated access of the application and "grey box" perspective wherein the tester has authenticated access.

In addition to the automated vulnerability tests, we use extensive manual testing techniques along with our proprietary knowledgebase of application attack profiles and web server vulnerabilities to test the application servers for exposures to confirm the profile of the application.

A Deloitte-performed vulnerability assessment in 2010 confirmed there were no significant vulnerabilities present in Pennsylvania's SLDS.

Deloitte will identify weaknesses in the target application by executing the following steps:

Steps	Activities	Key Considerations and Activity Parameters
Application Identification	The overall web application environment is confirmed and the components for evaluation are determined. Web application systems may include: • Coding language • Operating system • Application and Web servers	• Identify one external and internal web application for the assessment activity • Prioritize application modules and web pages for vulnerability identification. Identify up to 25 web pages for automated and manual tests

Steps	Activities	Key Considerations and Activity Parameters
Vulnerability identification	Identify inherent weaknesses in the design, implementation, and security controls of the applications. Evaluate the applications for controls and potential exposures in the authentication process, user input processing, session management, error handling, and encryption through exposures in: • Unsecured application settings • Logic and architecture weaknesses • Access control weaknesses • Cross-site scripting exposures • Back-end database access Perform "black-box" testing (without "privileged" or "end-user" knowledge) and "grey-box" testing (with user credentials) on the in-scope web applications. • Identify vulnerabilities on the server and application by executing commercial vulnerability scanner and application security tools respectively • Identify vulnerabilities on the server and application by executing non-commercial vulnerability scanner and application security tools respectively • Manually confirm the vulnerabilities identified by the tool • Identify the vulnerabilities present in the server and application which are not detected by the tools • Assess the business logic of the target application and identify vulnerabilities present in the business logic	• Use the application vulnerability scanning tool such as IBM AppScan to conduct the automated tests
Assessment Report	• Document the results into the assessment report along with suggested mitigation steps – Description of the vulnerability and its potential impact – Develop mitigations for remediation actions related to identified risks • Analyze the identified vulnerabilities with the "trusted agent" and the Commission key stakeholders.	• Conduct a meeting with the "trusted agent" to discuss the vulnerabilities identified from this assessment

Figure 4.4.1-15. Identifying Weaknesses.

"Trusted Agent"

As part of this testing, Deloitte will work with WVDE to identify at least one staff member to serve as a "trusted agent". The "trusted agent" will:

- Make decisions to proceed with applicable testing
- Coordinate the vulnerability testing efforts with the appropriate hosting agency for the SLDS
- Participate in the testing activity
- Identify WVDE's and its affiliates' and third parties (if applicable) mission-critical systems

The "trusted agent" will not provide Deloitte with access to such systems; furthermore Deloitte shall have no responsibility with regards to such systems. The "trusted agent" will coordinate and authorize Deloitte access to WVDE information technology components, which have been identified by WVDE, for web application vulnerability testing. In order to avoid interruptions, many of the assessment tasks are executed during non-business hours.

Vulnerability Assessment Mitigation

If WVDE procures this optional service, the Deloitte/eScholar team will be responsible for resolving high severity vulnerabilities identified in the eScholar Data Manager application prior to go-live. High severity vulnerabilities identified in the SLDS reporting application that are identified as a defect in the core application will be referred to IBM for resolution. Resolution of these vulnerabilities prior to go-live cannot be guaranteed. High severity vulnerabilities in the SLDS reporting application that are identified as a defect in the configuration of the IBM Cognos reporting tool, configuration of the semantic layer, or the configuration of the reports themselves will be resolved by Deloitte prior to go-live.

A high severity vulnerability is defined as a vulnerability that, should it be exploited, may result in "super-user" access (i.e., "administrator"). In addition, exploitation may also result in web defacement, phishing attacks and sensitive data disclosure. Finally, exploitation of the vulnerability may result in unauthorized access to privileged information.

4.4.2 Goal II: Technical Support

RFP Reference: Section 4.4. Qualifications and Experience, page, 28-29

4.4.2. As part of the WVDE's PK-12 SLDS initiative, the goal is to assure that the Vendor's DWRS proposal has sufficient technical support available to facilitate a smooth knowledge transfer to the WVDE. The successful Vendor's solution is expected to interface with critical WVDE data systems, West Virginia's P-20 Data Warehouse, and other data sharing partners.

This section provides a comprehensive overview of the Deloitte/eScholar SLDS solution and associated technical support as proposed for WVDE. Each individual solution component is presented along with the five step process to load the SLDS. The robust data validation capabilities of the solution are presented.

Following the SLDS solution overview is a detailed listing of the documentation that WVDE can expect to receive. Due to the COTS nature of our proposed solution, much of this documentation will be available on day one of the project. Other documentation will be created or customized specifically for WVDE. We also provide examples of documentation that our proposed staff have created and training/knowledge transfer activities that our staff have led on previous SLDS projects.

Please see *Section 4.4.5, Goal V: Project Management* for a detailed description of our proposed approach to the WVDE SLDS project, including the overall project schedule. Additionally, please see *Section 4.4.6, Goal VI: Transition Strategy* for a detailed description of our strategy to determine WVDE staff are ready to support the operation and maintenance of the SLDS once the implementation project is complete.

- Our SLDS solution leverages the leading education COTS data warehouse product to meet WVDE's needs.
- The five step process to load the SLDS includes significant built-in and configurable data validation capabilities.
- The robust solution documentation assists in a smooth transfer of knowledge to WVDE.
- The Deloitte/eScholar team members have significant SLDS specific documentation, training, and knowledge transfer experience.

4.4.2.1 Solution

RFP Reference: Section 4.4. Qualifications and Experience, page, 29

4.4.2.1 For the successful Vendor to provide a solution that allows for the successful data exchange with the WVDE and external data systems to support an effective DWRS. The specifications associated with this objective include the following. Include relevant examples from previous work with statewide or comparable education systems:

The Deloitte/eScholar team is proposing a solution based on COTS products for the WVDE SLDS. This includes the eScholar Complete Data Warehouse for PK-12 (CDW) for the collection, cleansing, validation and integration of the data in addition to optimized storage. This also includes the use of Cognos' Business Intelligence products for standard and ad hoc reporting as well as OnLine Analytical Processing (OLAP). We are proposing the eScholar CDW because it provides a single, proven, and highly integrated solution to meet the majority of the WVDE's requirements out-of-the-box. This low risk solution allows WVDE to quickly establish the SLDS and concentrate on your unique requirements.

Key features include:

- The eScholar CDW data model supports the integration, cleansing, and analysis of more than 3,000 data elements across more than 40 education data categories or "domains". Typically, the eScholar data model supports at least 90% of a state education agency's data needs out-of-the-box.
- The eScholar CDW supports industry standards/mandates including the Common Education Data Standards initiative, NCES, EDEN, FERPA, National Education Data Model, EDFacts, and the Schools Interoperability Framework (SIF)
- The eScholar CDW has built-in processes for data submission, validation, and loading. Over the years, eScholar has developed more than 750 powerful and well-documented data transformation, integration, and cleansing routines. These routines contain more than 30,000 individual transformation steps and have been proven and enhanced through the loading of millions of actual records for schools and students across the country. A routine can contain more than 200 verifications, transformations, and recodes which are essential to getting clean, valid data into a data warehouse.
- The eScholar CDW provides a comprehensive solution for managing Federal EDEN/EDFacts accountability reporting requirements.
- The eScholar CDW has also been implemented in support of growth models, Highly Qualified Teacher (HQT) analyses and many more accountability measures.
- The eScholar CDW is used to support a wide variety of dashboards, OLAP cubes, reports and analyses statistical tools and data driven applications. It is designed to be deployed as "the single source of data" that is open and accessible by a wide variety of technologies including ODBC compliant technologies compatible with Microsoft SQL Server (our chosen DBMS for this implementation).

Using eScholar's CDW eliminates the need for lengthy and expensive design and development phases, thereby reducing the overall project timeline, cost, and risk. For this reason, and due to our team's significant experience implementing the eScholar CDW as part of similar solutions for other state education agencies, we propose to complete this project in just nine months.

The following figure depicts our solution for WVDE's SLDS. Additional detail regarding our solution components is also provided following.

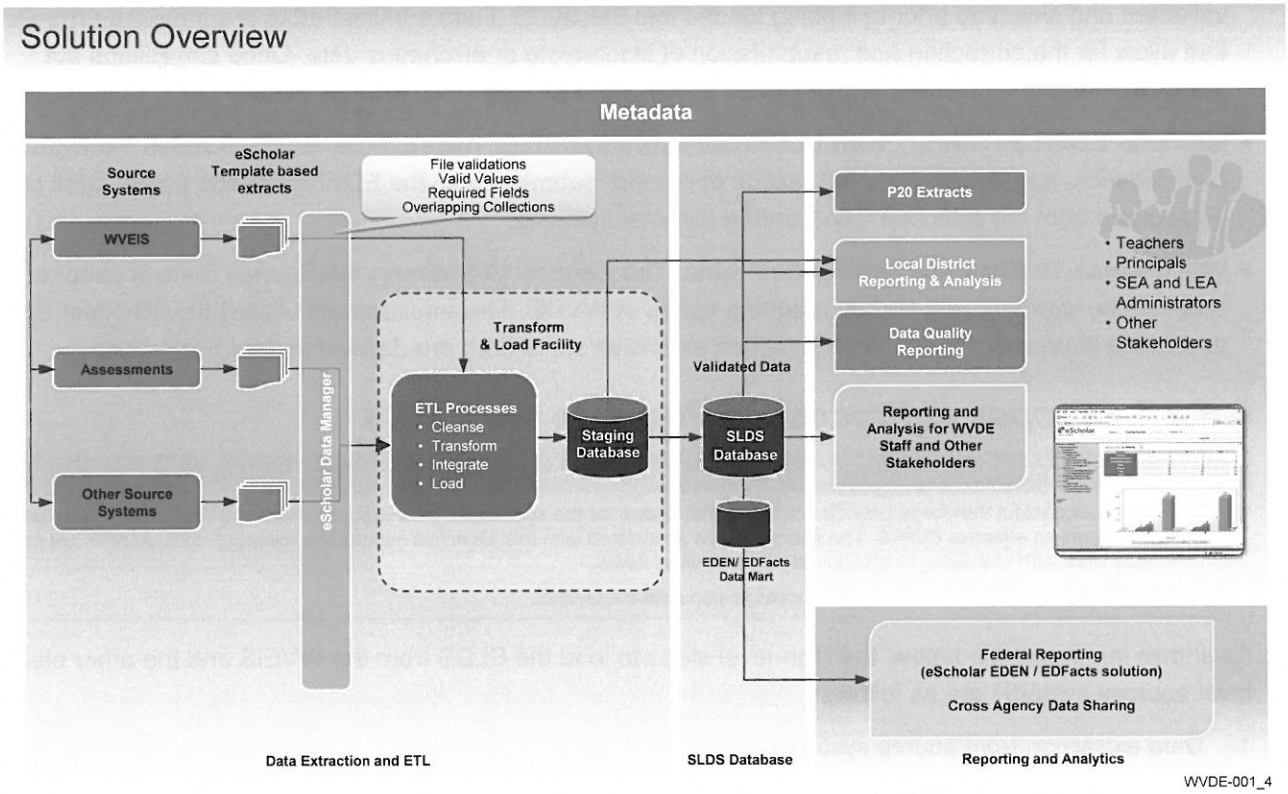


Figure 4.4.2-1. The Deloitte/eScholar Solution for WVDE's SLDS.
Our proposed solution utilizes best-of-breed COTS components to meet WVDE's needs.

Integrated Components of the Deloitte/eScholar SLDS Solution

The components of the Deloitte/eScholar SLDS solution includes:

- **eScholar Complete Data Warehouse® for PK-12.** The eScholar CDW is a robust, highly scalable repository for storing areas of PK-12 education data. It is the most widely used COTS solution in the market today.
- **eScholar Data Manager™ (eDM).** The eScholar CDW incorporates eDM, an intuitive, browser-based data management tool to seamlessly manage submission of data by both state and LEA personnel in a centralized or decentralized environment. The interface allows Data Administrators to configure the system – data collection periods, data sets to be collected, data quality checks, user access, roles, and permissions, event-triggered email notification, automation, and more. eDM currently manages the receipt and loading of data from hundreds of LEAs or schools, or from state facilities, and presents load statistics and user-friendly data quality and data error reports to appropriate parties.
- **eScholar eTL™.** eTL is a portion of the eScholar data loading process that transforms, cleanses and loads data into the warehouse (aka "eScholar Transform and Load" software). Our solution provides the ability to easily configure and collect data from many disparate systems into a centralized Staging Database.

- **eScholar Data Integration Templates™.** eScholar Data Integration Templates are the standard formats of data that the eScholar CDW can transform, cleanse, load, and process. Data in the Staging Database is validated and cleansed prior to it being loaded into the SLDS. Data administrators are provided error files that allow for the correction and resubmission of incomplete or erroneous data. Once corrections are made, the data are validated and cleansed again, and then uploaded into the SLDS.
- **eScholar EDEN Solution™ with EDEN/EDFacts Reporting.** The eScholar EDEN Solution manages the consolidation, aggregation and calculation of data for submission to the EDEN/EDFacts portal. Data can be sourced from the eScholar CDW and/or external systems.
- **IBM Cognos 10 Business Intelligence Suite.** The Cognos 10 Business Intelligence Suite is used to address the standard and ad hoc reporting needs of WVDE. This environment utilizes the eScholar CDW as its data source to provide WVDE with an extensive set of both pre-defined and ad hoc reports.

4.4.2.1.a Proposed Process to Populate the DWRS

RFP Reference: Section 4.4. Qualifications and Experience, page, 29

4.4.2.1 For the successful Vendor to provide a solution that allows for the successful data exchange with the WVDE and external data systems to support an effective DWRS. The specifications associated with this objective include the following. Include relevant examples from previous work with statewide or comparable education systems:

- 4.4.2.l.a. Describe in detail the proposed process to populate the DWRS.

As shown in the graphic below, the high-level steps to load the SLDS from the WVEIS and the other state-level sources systems are as follows:

1. Data extraction from source systems
2. Pre-ETL validation and data quality routines in eDM
3. Data loading into the Staging Database using eDM
4. Final validation of the data using reports
5. Data movement from the Staging to the SLDS Database

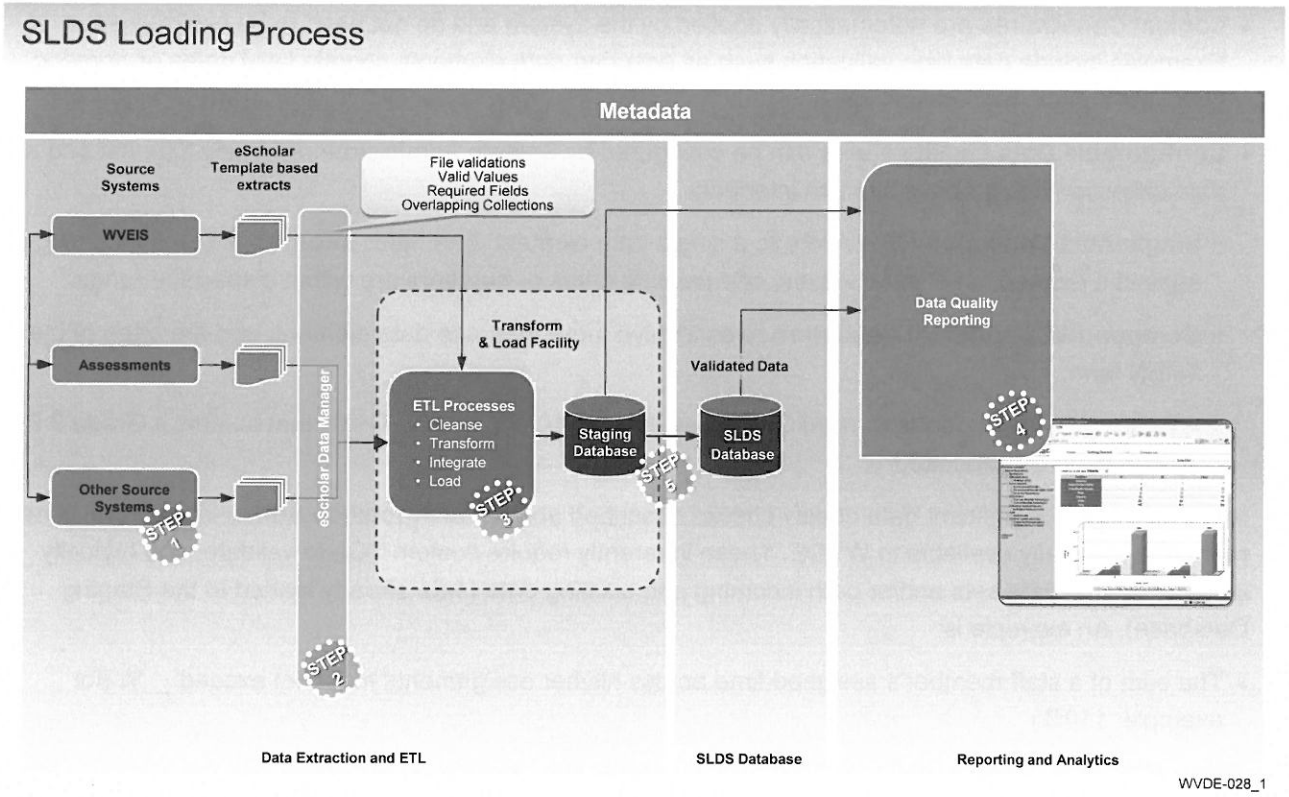


Figure 4.4.2-2. The Five Step Process to Load the SLDS.
The five step process to load the Deloitte/eScholar SLDS includes significant built-in and configurable data validation capabilities.

Each of these steps is discussed in detail below. Please also see the subsequent *Section 4.4.2.1.b* for additional information on the features and capabilities of our SLDS solution.

Step 1. Data Extraction from Source Systems

The subject specific eScholar Data Integration Templates will provide the format for WVDE source system owners to extract data from source systems. Once data are extracted from the source systems by the WVDE source system owners in the template format, the data can be transmitted on a scheduled or manual basis.

Step 2. Pre-ETL Validation and Data Quality Routines in eDM

Once the data from the source systems are extracted in eScholar template format, the extracts are ready for submission. eDM provides the capability to accept files from a preset directory. eDM can be configured to poll that directory periodically (every 30 seconds or every 30 minutes) looking for files. When eDM detects files in the designated directory, it will process them, in the prescribed order, and send an email notification to the designated email address with a status report.

Through eDM, System Administrators can define any number of data quality constraints, and apply those checks to a particular data collection. Data files submitted to the system are first validated against this set of data quality checks. The data quality checks available within the system can be categorized as follows:

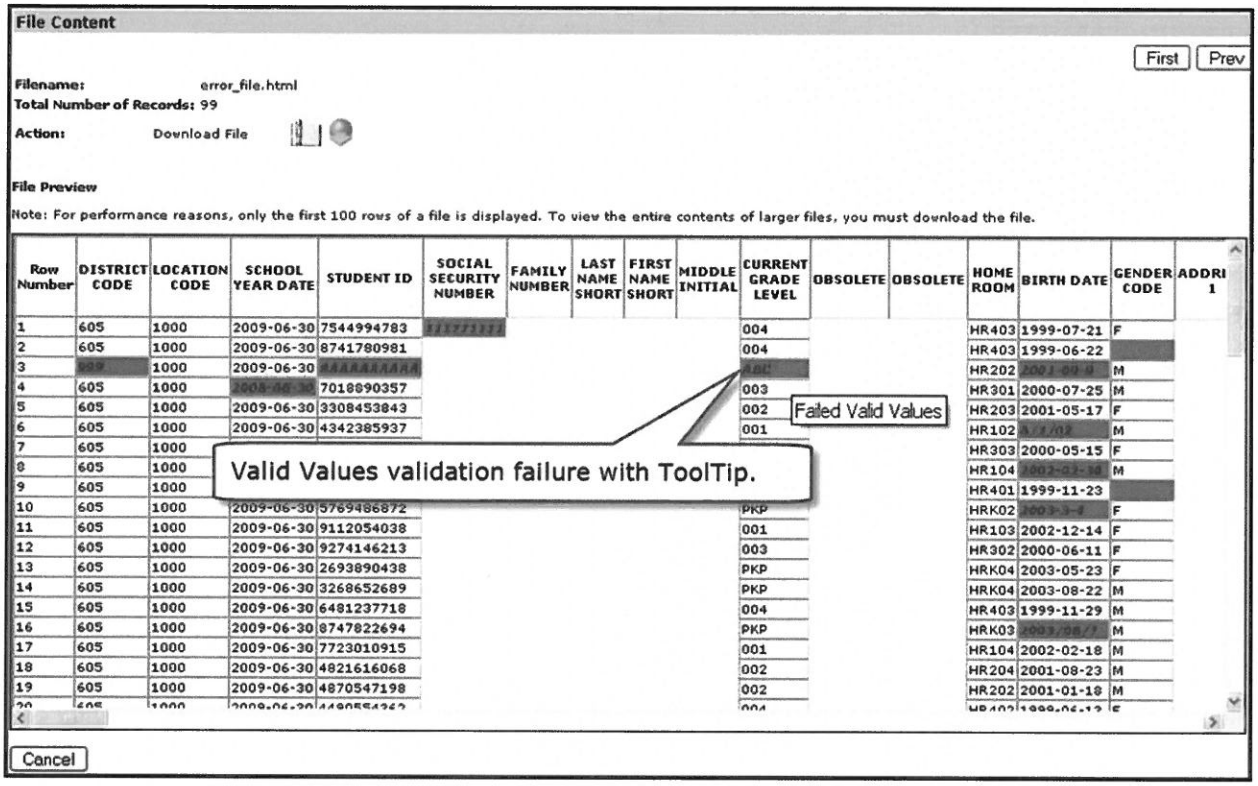
- **Logical Constraints** are automatically applied by the system and do not need to be explicitly set. Examples include data type validation such as ensuring *date* elements contain valid dates or *numeric* elements contain numeric values.
- **Configurable Data Quality Rules** can be configured by System Administrators for any data set and any data collection using eDM's intuitive interface.
  - **Single-field Validation** rules relate to a single data element. Examples include validating incoming data against a defined set of valid values, or validating dates or numbers are within a specified range.
  - **Compound/Conditional Validation** rules involve more than one data element, and are often of the IF THEN form.
    - Example: IF a student's Current Grade Level = (09, 10, 11, or 12), THEN that student's Grade 9 Entry Date must be populated

In addition to the significant data quality checks described above, **advanced customer-specific business rules** are optionally available to WVDE. These inherently require custom SQL to validate, and typically involve multiple data sets and/or both incoming and existing data (data already loaded to the Staging Database). An example is:

- The sum of a staff member's assigned time across his/her assignments must not exceed __% (for example, 110%)

These advanced rules are defined in detail by customer personnel in collaboration with the eScholar product team, and are coded and implemented by eScholar in the customer's installation. Once implemented, these rules are available to be applied to any appropriate data collection and data set by the customer's System Administrators. The process of defining, coding, testing, and implementing these rules is consultative. These consultative services are included in our proposal as optional.

Files and records that fail the data quality checks are identified in error reports accessible by their respective data owners. eDM contains an e-mail notification system to send configurable alerts based on system events. Alerts can be triggered to notify specific user groups regarding events such as data validation errors that require user intervention. Users are then able to view the status of any data submitted through the application.



Row Number	DISTRICT CODE	LOCATION CODE	SCHOOL YEAR DATE	STUDENT ID	SOCIAL SECURITY NUMBER	FAMILY NUMBER	LAST NAME SHORT	FIRST NAME SHORT	MIDDLE INITIAL	CURRENT GRADE LEVEL	OBSOLETE	OBSOLETE	HOME ROOM	BIRTH DATE	GENDER CODE	ADDRI 1
1	605	1000	2009-06-30	7544994783						004			HR403	1999-07-21	F	
2	605	1000	2009-06-30	8741780981						004			HR403	1999-06-22		
3		1000	2009-06-30										HR202		M	
4	605	1000		7018890357						003			HR301	2000-07-25	M	
5	605	1000	2009-06-30	3308453843						002			HR203	2001-05-17	F	
6	605	1000	2009-06-30	4342385937						001			HR102		M	
7	605	1000											HR303	2000-05-15	F	
8	605	1000											HR104		M	
9	605	1000											HR401	1999-11-23		
10	605	1000	2009-06-30	5769486872						PKP			HRK02		F	
11	605	1000	2009-06-30	9112054038						001			HR103	2002-12-14	F	
12	605	1000	2009-06-30	9274146213						003			HR302	2000-06-11	F	
13	605	1000	2009-06-30	2693890438						PKP			HRK04	2003-05-23	F	
14	605	1000	2009-06-30	3268652689						PKP			HRK04	2003-08-22	M	
15	605	1000	2009-06-30	6481237718						004			HR403	1999-11-29	M	
16	605	1000	2009-06-30	8747822694						PKP			HRK03		M	
17	605	1000	2009-06-30	7723010915						001			HR104	2002-02-18	M	
18	605	1000	2009-06-30	4821616068						002			HR204	2001-08-23	M	
19	605	1000	2009-06-30	4870547198						002			HR202	2001-01-18	M	

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Figure 4.4.2-3. eDM File Details - Pre-ETL Validation File Contents.
This tab displays the contents of the data file with any errors highlighted. Hovering the mouse over a highlighted error will display a description of the validation.

Step 3. Data Loading into the Staging Database Using eDM

Once the files have been subjected to the data quality checks and cleansed as a result, eDM automation initiates the transformation and loading of data into the Staging Database. This process can also be performed manually. During this process, a time stamp is recorded and stored for each incoming file. Demonstrated transformation and load processes transform the data to conform to shared dimension keys (student, location, district, etc.) and recode selected fields based on the translations specified in lookup tables. The transformation and load processes determine which records should be inserted or changed and then update the eScholar Staging Database accordingly. When data issues are detected, error files are produced identifying each specific record and field where the issue(s) exist to assist the data administrator in identifying source data to be corrected. WVDE can configure the system to notify the data administrator(s) at various stages as the data are being processed.

To confirm data integrity and to optimize transformation and loading performance, each insert or update requires that a complete record be submitted. When a record is updated, the record in the file being loaded replaces the existing data for that record even if the fields in the record being loaded are blank or null.

Staging Database

Once the files are processed through the ETL, the data are loaded into the Staging Database. The Staging Database uses the eScholar CDW data model, which is a conformed dimension star schema that integrates a broad range of data and enables fast and easy reporting, The conformed dimension structure is an essential design element, as it supports the ability to manage the complex relationships between important entities such as students and staff, as well as programs and locations. The data model includes eScholar's design for storing a wide variety of formative, college readiness and high stakes achievement assessments in a single data structure that enables multiple assessments to be analyzed within a single query.

As has been successfully accomplished for eight other SEAs, we are proposing the eScholar CDW data model for both the Staging Database and the SLDS. Among many benefits, such an approach allows the same reports to be used for analyzing data in the Staging Database as well as for reporting against the SLDS.

Step 4. Final Data Validation Using Reports

To perform a final validation of the data, the Deloitte/eScholar team will provide Data Quality Reports. Verification reports confirm the data loaded in the Staging Database upon ETL processing. We will provide a set of data verification reports, each based on a single eScholar template, to run against the data in the Staging Database. As we have done with other SEAs, we will provide two types of reports – summary and detailed. The summary level reports will enable WVDE to determine whether the correct number of records has been loaded by data categories such as LEA, School, Race, Gender, etc. The detailed level reports will enable WVDE to validate the quality and consistency of the data being loaded.

The validation reports will include capabilities that can detect cross-template data anomalies such as students without classes, teachers without classes, and classes without students.

Step 5. Data Movement from the Staging to the SLDS Database

Once the final report-level validations are complete, the data are moved from the Staging to the SLDS Database using native SQL Server database management features. In the SLDS the data is utilized for reporting and analysis, data sharing with other agencies, loading into West Virginia's P-20W, etc.

4.4.2.1.b Tools Solution Uses

RFP Reference: Section 4.3. Qualifications and Experience, page, 26

4.4.2.1 For the successful Vendor to provide a solution that allows for the successful data exchange with the WVDE and external data systems to support an effective DWRS. The specifications associated with this objective include the following. Include relevant examples from previous work with statewide or comparable education systems:

- 4.4.2.I.b. Provide a detailed narrative describing the tools the Vendor's solution leverages for (1) the Extract, Transform, Load (ETL) process, (2) reporting processes, and (3) analysis and interpretation of data in the reports.

This section provides an overview of the eScholar products that make up our proposed solution, the eScholar Complete Data Warehouse, the eScholar Data Manager, and the eScholar EDEN/EDFacts Solution. The attributes that make eScholar the leading COTS solution in the marketplace today are discussed in detail. Note that the description of eScholar's ETL processes is included within the eScholar Data Manager section.

For information on reporting processes beyond EDEN/EDFacts reports/files, and the analysis and interpretation of data in the reports, please see *Section 4.4.3, Goal II Reporting and Analysis*.

eScholar Complete Data Warehouse (CDW)

The CDW is a well-established, fully documented COTS solution that has been implemented in eight states. The CDW demonstrates the ability to meet overall SLDS requirements and supports federal accountability reporting requirements including the No Child Left Behind Act's (NCLB) Adequate Yearly Progress (AYP), Highly Qualified Teachers and EDEN/EDFacts submissions. The CDW also retains the flexibility to meet individual state needs.

The source neutral approach to data integration in the CDW allows data collection from a variety of education data sources and minimizes the effects of source system changes on the solution. The CDW can be populated from numerous district student information systems or centralized state source systems. The CDW's robust data model is compliant with major industry standards, and supports the integration, cleansing, and analysis of more than 3,500 data elements across 40 education data categories or "domains". The CDW has built-in processes for data submission, validation, and loading. Each data loading routine can contain hundreds of verifications, transformations, and recodes which are essential to getting clean, valid data into the SLDS. eScholar has developed and enhanced more than 750 powerful and well-documented data transformation, integration, and cleansing routines. These routines contain more than 30,000 individual transformation steps and have been demonstrated and enhanced through the loading of millions of actual records for schools and students across the country. The Deloitte/eScholar Team's experience coupled with the maturity of the eScholar data model minimizes deployment risk to WVDE.

The eScholar CDW offers long-term stability. The product is supported by a company that is a leader in the education data management field. eScholar offers dedicated staff to support each customer implementation, a help desk, a support Web site, and a large user community of customers with interests and goals similar to WVDE that interfaces with the company regularly to provide guidance on its product roadmap. All of this provides a unique advantage for WVDE's long-term vision. The eScholar CDW is the only COTS data warehouse that is integrated with a postsecondary counterpart.

The eScholar CDW Data Model

The eScholar CDW data model is a conformed dimension star schema that integrates a broad range of data and enables fast and easy reporting. The conformed dimension structure is an essential design element, as it supports the ability to manage the complex relationships between important entities such as students and staff, as well as programs and locations. The data model includes eScholar's design for storing a wide variety of formative, college readiness and high stakes achievement assessments in a single data structure that enables multiple assessments from different vendors to be analyzed within a single query. The eScholar CDW data model is fully documented and supported with extensive documentation on industry practices for loading data into the data model. eScholar's broad deployment and leadership in the implementation of standards has made the eScholar data model the standard platform for data-driven decision systems in K-12 education.

The eScholar CDW data model has been inspired by the National Center for Education Statistics Data Handbooks. We have also alerted NCES to data elements our user community tracks that are not included in the Data Handbooks. Although our data model predates the National Education Data Model (NEDM) and the

Common Education Data Standards (CEDS), we are very interested in supporting data standards where they exist. In keeping with that philosophy, eScholar contributed over 750 data elements to NEDM and has been an advocate for the US Department of Education's CEDS initiative.

The eScholar CDW data model embraces standards, while making sure that our solution is practical, in other words, that it will address the needs of our user community – the largest community of users of an education SLDS solution in the United States.

Source System Neutral

The eScholar CDW has been used to collect and integrate data from hundreds of education software products across eight state education agency deployments and over 2,900 school districts. We have state education agency customers who have used the proposed solution for almost ten years and have successfully switched data source systems.

The eScholar Data Integration Templates, which provide the specification for creating data files for submission, have been used to source data from hundreds of source systems including most of the student information systems sold in the United States and most of the leading sources of other data education agencies track. It is important to note that the eScholar Data Integration Templates are backwards compatible. In other words, if eScholar adds a data element to a template, which it often does in its continued effort to support the needs of the eScholar community of users of its products (the templates are subject specific), eScholar implements the enhancements so that files built to a prior release's specifications can still be processed – in other words, the system does not need any of the systems that interface with it to make changes to their interface simply to keep the system running. Changes can be made as a business needs dictate, not for operational reasons.

eDM is also source system agnostic. It simply requires that files in the eScholar Data Integration Template format be deposited into the designated directory for processing. Our ETL processes will process the files submitted through the eDM regardless of the source. Many eScholar customers have successfully changed data sources over the course of their deployment of the eScholar solution.

eScholar Data Integration Templates

The eScholar CDW comes complete with the well documented eScholar Data Integration Templates, which define the layouts, extract rules and specifications for creating files that can be loaded into the CDW data model. Each template is an Excel worksheet defining fields, field length and data type information, extract rules and data file dependencies. The workbook includes both data content and dimensional lookup templates and, In general, there is one template per data model table. Sample data values and matching NCES Data Handbook Element Numbers are also provided, where applicable.

An example of an eScholar Data Integration Template is provided in Appendix A.

Embedded Time Grains

The eDM Collection Manager is designed to manage the complex scheduling of collecting data from different sources on different schedules. For example, data from WVEIS may be collected and processed daily, or even more frequently, while college readiness assessments like the SAT, PSAT and ACT will only be loaded periodically when data are available from the test administrators. Key eScholar Data Integration Templates

have one of three embedded time grains that allow users to define the granularity of their data collections over time.

- **SCHOOL YEAR - One date at the year level**. One example of a template that captures data at this time grain is Enrollment Codes, which are generally applicable to a given school year.
- **POINT IN TIME - One date at the day level**. One example of a template that captures data at this time grain is Student Snapshot, For example, for Student demographic data, some SEA clients set four or six Student Snapshot data capture dates each year, although the system has no limits – the eScholar CDW allows for an unlimited number of snapshot dates.
- **START AND END - Start and end date at the day level**. One example of a template that captures data at this time grain is Program Fact, which provides the capability to capture the actual start and end date of student participation in a given program.

Clients have the flexibility to capture data at a higher time grain level than supported by the template. For example, if the client does not wish to track the actual start and end dates of student program participation and, instead, would like to track which students are in which programs at a specific point in time, the client may elect to record the start and end date as the same date, effectively using the template as a snapshot. Just as with the Student Snapshot example described above, the client has the flexibility to choose the required capture dates and also has the flexibility to vary the number of capture dates from data domain to data domain.

Our solution allows the client to determine when to take snapshots. In our experience the snapshot approach strikes the right balance between capturing relevant changes but not so many changes that reporting and data loading becomes onerous.

Student demographic snapshots can be taken at crucial points (e.g. 40th day count date) to capture the composition of the student body at a point in time. A snapshot of the students and their demographics can also be captured in association with the administration of an assessment. This feature provides the ability to understand differences in the makeup of the student body at different points during a school year.

eScholar Data Manager (eDM)

eDM is the browser-based GUI enabling administration of the data receipt and loading process. eDM includes an interface for configuration of robust data quality rules and application of those rules against incoming data. This allows errant data to be identified and stopped before being loaded to the SLDS. eDM presents user-friendly data error reports identifying this errant data and the reason for error. Other functionality includes configurable, customizable, event-driven email notification, statuses on the loading of data at each step in the process, presentation of load metrics (records loaded, records in error, number of errors, etc.), and workflow for automating the data loading process.

Please see the above *Section 4.4.2.1.a* for more information on eDM's features, most specifically eDM's automation and built-in and configurable data validation capabilities.

The eScholar EDEN/EDFacts™ Solution

The eScholar EDEN/EDFacts Solution streamlines the process of sourcing and transforming data and producing data files properly named, formatted, and ready for submission to the EDEN/EDFacts portal as required by the U.S. Department of Education (USED). The solution enables data to be sourced both from the eScholar CDW tables and from external sources, as appropriate. The eScholar EDEN/EDFacts Solution includes:

- The eScholar EDEN/EDFacts Data Mart™
- Packaged ETL for sourcing and transforming data and loading the data mart
- Packaged ETL that produces EDEN/EDFacts files ready for submission to the USED's EDEN submission system
- An intuitive interface for managing these processes
- Full system and user documentation, updated as EDEN/EDFacts requirements change over time

Once data have been transformed and loaded to the eScholar EDEN/EDFacts Data Mart, eScholar's documentation can be utilized to develop reports/queries so that the data can be analyzed and confirmed as accurate prior to submission to USED. Once the data have been reviewed for accuracy and completeness, our packaged extraction routines produce EDEN/EDFacts files ready for submission.

eScholar's Support for Changes in EDEN/EDFacts Reporting

Since the EDEN/EDFacts file specifications are subject to change from year to year, eScholar reviews the file specifications each year and applies updates to the eScholar EDEN/EDFacts Data Mart tables, business rules, and processes to stay in compliance with the changing USED requirements. eScholar publishes an updated eScholar EDEN/EDFacts User Guide as required to map the eScholar EDEN/EDFacts Data Mart data elements to the EDEN/EDFacts requirements. eScholar also provides detailed documentation and procedures to implement the upgrades as required. These eScholar updates are provided as part of the regular maintenance and support contract for customers that select the eScholar EDEN/EDFacts solution.

EDEN/EDFacts Reports/File Generation Capabilities

eScholar will include the capability to generate the EDEN/EDFacts files detailed in the table below using the eScholar EDEN/EDFacts Solution. Please note this list is intended to reflect the current EDEN/EDFacts requirements and is subject to change as those requirements change.

#	EDEN/EDFacts Report Name
N002	Children with Disabilities (IDEA) School-Age
N004	Children with Disabilities (IDEA) Not Participating in Assessments
N005	Children with Disabilities (IDEA) Removal to Interim Alternative Educational Setting
N006	Children with Disabilities (IDEA) Suspensions/Expulsions
N007	Children with Disabilities (IDEA) Reasons for Unilateral Removal
N009	Children with Disabilities (IDEA) Exiting Special Education
N010	Public School Choice
N029	Directory

#	EDEN/EDFacts Report Name
N030	Discipline Incidents
N032	Dropouts
N033	Free and Reduced Price Lunch
N035	Federal Programs
N036	Title I Part A TAS Services
N037	Title I Part A SWP/TAS Participation
N039	Grades offered
N040	Graduates/ Completers
N041	Graduation Rate
N043	Homeless Served (McKinney-Vento)
N045	Immigrant
N046	LEP Students in LEP Program
N050	Title III LEP English Language Proficiency Results
N052	Membership
N054	MEP Students Served - 12 Months
N059	Staff FTE
N063	Teacher Quality in Elementary Classes
N064	Teacher Quality in Core Secondary Classes
N065	Federally Funded Staff
N067	Title III Teachers
N070	Special Education Teachers
N082	CTE Concentrators Exiting
N083	CTE Concentrators Graduates
N086	Students Involved with Firearms
N088	Children with Disabilities (IDEA) Disciplinary Removals
N089	Children with Disabilities (IDEA) Early Childhood
N094	Firearm Incidents
N099	Special Education Related Services Personnel
N103	Accountability
N106	Elementary/Middle Additional Indicator
N107	High School Graduation Rate Indicator
N108	Mathematics Participation Status
N109	AMO Mathematics Status
N110	Reading/Language Arts Participation Status
N111	AMO Reading/Language Arts Status
N112	Special Education Paraprofessionals
N113	N or D Academic Achievement - State Agency
N116	Title III LEP Students Served

#	EDEN/EDFacts Report Name
N118	Homeless Students Enrolled
N119	N or D Participation - State Agency
N121	Migrant Students Eligible - 12 Months
N122	MEP Students Eligible and Served - Summer/Intersession
N123	MEP Students Served - Regular School Year
N124	MEP Students Served - Summer/Intersession
N125	N or D Academic Achievement - LEA
N126	Title III Former LEP Students
N127	N or D Participation - LEA
N128	Supplemental Educational Services
N129	CCD School
N130	ESEA Status
N131	LEA End of SY Status
N132	School End of SY Status
N134	Title I Part A Participation
N135	N or D Long Term
N136	Students Disciplined
N137	LEP English Language Proficiency Test
N138	Title III LEP English Language Proficiency Test
N139	LEP English Language Proficiency Results
N141	LEP Enrolled
N142	CTE Concentrators Academic Achievement
N143	Children with Disabilities (IDEA) Total Disciplinary Removals
N144	Educational Services During Expulsion
N145	MEP Services
N146	Children with Disabilities (IDEA) Alternate Assessment Caps
N150	Regulatory Four-Year Adjusted-Cohort Graduation Rate
N151	Cohorts for Regulatory Four-Year Adjusted-Cohort Graduation Rate
N152	Corrective Actions
N153	Restructuring Actions
N154	CTE Concentrators Graduation Rate
N155	CTE Participants in Programs for Non-traditional
N156	CTE Concentrators in Programs for Non-traditional
N157	CTE Concentrators Technical Skills
N158	CTE Concentrators Placement
N159	Average Scale Scores
N160	High School Graduates Postsecondary Enrollment
N161	High School Graduates Postsecondary Credits Earned

#	EDEN/EDFacts Report Name
N163	Discipline Data
N164	PSC/SES Data
N165	Migrant Data
N166	Evaluation of Staff
N167	School Improvement Grants
N168	Charter Schools
N169	CTE Type of Placement
N170	LEA Subgrant Status
N171	Academic Achievement - Flexibility Subgroups
N172	Assessment Participation - Flexibility Subgroups
N173	Status - Flexibility Subgroups
N174	Graduation Rates - Flexibility Subgroups
N175	Academic Achievement in Mathematics
N176	State Interventions
N177	Graduation Cohorts - Flexibility Subgroups
N178	Academic Achievement in Reading (Language Arts)
N179	Academic Achievement in Science
N180	N or D in Programs Outcomes
N181	N or D Exited Programs Outcomes
N182	N or D Transition Services
N183	Title I Allocations - Flexibility
N185	Assessment Participation
N188	Assessment Participation
N189	Assessment Participation

Figure 4.4.2-4. EDEN/EDFacts Reports/Files Currently Supported by eScholar.
The eScholar EDEN/EDFacts solution streamlines the process of sourcing and transforming data and producing data files properly named, formatted, and ready for submission to the EDEN/EdFacts portal as required by USED.

4.4.2.2 Levels of Support

4.4.2.2.a Documentation

RFP Reference: Section 4.4. Qualifications and Experience, page, 29

4.4.2.2 For the successful Vendor to provide a DWRS that has appropriate levels of support and training for the WVDE technical staff. The specifications associated with this objective include the following:

- 4.4.2.2.a. Provide a detailed list of the proposed documentation, the process to develop documentation, and the expected content of the documentation that will be provided to the WVDE as part of the installation and configuration of the Vendor's proposed solution. Describe the necessary software that is required to access the documentation.

The solution documentation that will be provided to WVDE is presented in the table below. Due to the COTS nature of our proposed solution, much of this documentation will be available on day one of the project. Other documentation will be created or customized specifically for WVDE. The robust documentation of our solution assists in a smooth transfer of knowledge to WVDE.

No special software will be necessary to access the documentation; documentation will be created and available using recent versions of standard software such as Adobe and the Microsoft Office suite.

Title of Document	Audience	Description of Contents
eScholar Data Integration™Templates	Data Analysts	Defines the layouts and extract rules for creating files that can be loaded into the CDW data model. Each template is an Excel worksheet defining fields, field length and data type information, extract rules and data file dependencies. Sample data values and matching National Center for Education Statistics (NCES) Data Handbook Element Numbers are also provided, where applicable. Both Warehouse and Lookup templates are available in the same workbook. In general there is one template per data model table.
Assessment Extract Lookup Data Load Templates	Data Analysts	Defines the layouts and extract rules for creating files that can be loaded into the CDW data model in support of eScholar Assessment Extract plans. Each template is an Excel worksheet defining fields, field length and data type information, extract rules and data file dependencies. There is one template per assessment extract lookup table.
New Features Guide	System Administrators	Specifies the significant new features in the current version of the eScholar CDW such as infrastructure changes, new fields and business rules by domain, and support changes.
Post Release Notes	System Administrators	Provides a list of defects detected and how they have been addressed since the general availability of the last major release.
Best Practices Guide	Data Analysts	Provides a definition for each template field. The documents are organized by data domain and provide the additional information needed to understand the purpose of each field. They are meant to supplement the information already found on the templates, i.e., business rules and NCES Element Numbers.
Load Plan Parameter Guide	System Administrators	Contains the detailed information that describes each eScholar Load Plan, in particular the parameters that can be specified for each plan. There is one Load Plan for each eScholar template. The Load Sequence (found in the lower part of each template) defines the order in which to load the data.
Data Model Diagrams	System Administrators, Data Analysts	Define the eScholar CDW Data Models for Oracle DBMS and Microsoft SQL Server DBMS. The Lookup and Warehouse tables are defined in a single Data Model document.
Physical Data Model	System Administrators, Data Analysts	Defines the eScholar CDW physical Data Model

Title of Document	Audience	Description of Contents
Assessment Extract Plan Installation Guide	Data Analysts	Provides the instructions for loading assessment lookup table data, importing assessment plans into the repository and setting up command files for newly imported plans. This document is intended to be used by self-hosted clients using eScholar-supplied assessment extraction plans.
Valid Values Guide	System Administrators, Data Analysts	Provides guidance on implementing the eScholar Valid Values solution, which allows clients to assess certain data fields against a required set of codes. The solution allows the client to select the desired level of validation separately for each individual field that may be assessed. Fields associated with Lookups and selected other fields are part of the Valid Values solution.
Guide to eScholar Utilities	System Administrators	Contain detailed information on Utility Plans provided in the eScholar Repository including a plan to create Calendar Period data, plans to generate data for a new School Year or Fiscal Year and a plan to retrieve load plan statistics.
Guide to Extracting Data	System Administrators, Data Analysts	Contains information useful to developers of extract routines including a detailed description of the contents of the eScholar templates and an overview of how the eScholar data load plans work.
Guide to Understanding Assessment Error and Warning Logs	System Administrators	Provides guidance in understanding and correcting errors and warnings associated with assessment lookups that may result from extracting assessment data using eScholar-supplied assessment extraction plans. This document is intended to be used by self-hosted clients using eScholar-supplied assessment extraction plans.
Guide to Importing Data Using Excel	Extract Writers	Describes how to import data into an MS Excel file to easily manipulate the data while preserving the data integrity.
Validation Settings Worksheet	System Administrators	Provides a mechanism to record the desired validation setting (ACCEPT, WARN, WARNNULLOK, REJECT, REJECTNULLOK) for each field which may be assessed in the CDW. This master worksheet can then be used to guide making the appropriate updates either in the command files or within eDM.
Access Database Template Tool Guide	Extract Writers, Data Analysts	Describes the eScholar Access DB Template Tool and how this tool can be used in conjunction with the eScholar data templates.
eDM User's Guide	eDM Users	Provides application-related information about the eDM System, including details about application screens, various fields and keywords, and buttons used throughout eDM.
eDM Administrator's Guide	System Administrators	Presents information designed specifically for Administrators of eDM. This manual is similar to the User Guide mentioned above; however, additional administrative information is included for eDM.
eDM Installation Guide	System Administrators	Provides the guidelines for installing and configuring the eDM component of the eScholar CDW.
eDM New Features Guide	System Administrators	A list of the significant new features in the current version of the eDM.
eDM Console User Guide	System Administrators	Contains the details about application screens, various fields and keywords, and buttons used throughout the eDM Admin Console and will discuss usage.
eDM Console Installation Guide	System Administrators	Contains the details about application screens, various fields and keywords, and buttons used throughout the eDM Admin Console and will discuss usage.

Title of Document	Audience	Description of Contents
Template Documentation	Extract Writers, Data Analysts, Source System Owners, Extract Writers, System Administrators	Documentation of SLDS tables and elements loaded by WVDE, providing definitions, value domains, data type and length, data source, and data derivation for calculated values. To be utilized by the WVDE Extract Writers to develop the extracts in the appropriate format.
Reporting User Guide	Report Authors, Ad Hoc Users	Documentation of reporting and ad hoc capabilities for the users of the reports and the OLAP cubes.
Data Migration Plan	System Administrators, Source System Owners, Extract Writers	Documentation of the schedule and approach for the extract, transform and load from WVDE data sources to the SLDS targets.

Figure 4.4.2-5. The Deloitte/eScholar SLDS Solution Documentation.
The robust documentation of our solution assists in a smooth transfer of knowledge to WVDE.

4.4.2.2.b Data Dictionary

RFP Reference: Section 4.4. Qualifications and Experience, page, 29

4.4.2.2 For the successful Vendor to provide a DWRS that has appropriate levels of support and training for the WVDE technical staff. The specifications associated with this objective include the following:

- 4.4.2.2.b. Describe any Data Dictionary tools (auto generated & updating) included with the vendor's proposed solution.

The Template Documentation that the Deloitte/eScholar team will produce will serve as the data dictionary. This documentation will include the following for each table/data element loaded by WVDE within the eScholar CDW:

- Data definition
- Data type
- Data length
- Whether the data element is loaded based on a mandatory or optional basis
- Value domains (e.g., code set)
- The calculation if a derived value
- The system(s) from which the data is sourced
- The frequency upon which the data are updated

4.4.2.2.c Examples of Successful Documentation

RFP Reference: Section 4.4. Qualifications and Experience, page, 29

4.4.2.2 For the successful Vendor to provide a DWRS that has appropriate levels of support and training for the WVDE technical staff. The specifications associated with this objective include the following:

- 4.4.2.2.c. Specify which of the Vendor's listed staff or subcontractors will be responsible for each aspect of the documentation development and knowledge transfer processes. Provide examples of how these staff have successfully developed technical documentation and trained technical staff during transition in prior projects.

As described above, the eScholar and IBM Cognos tool documentation is available out-of-the-box on day one of the project. The custom documentation will be developed by our Functional Lead, Blake Kiefer. Our Training Team of Lisa Keegan and Lisa McNicholas, with assistance from Blake Kiefer, will be responsible for training the technical staff and providing knowledge transfer during the transition. The table below

provides examples of relevant previous documentation developed or training conducted by each of these individuals.

Deloitte/eScholar Team Member	Documentation or Knowledge Transfer/Training Responsible For	Examples of Previously Developed Documentation or Knowledge Transfer/Training Activities
Blake Kiefer, Functional Lead	Creating the custom documentation	Blake has served as the Functional Lead on SLDS projects for Colorado, New Mexico, and Pennsylvania. He has developed custom documentation such as template documentation, reporting user guides, data migration plans, and extract specifications. Blake has also developed training presentations and videos and conducted trainings. On SLDS projects Blake has provided SLDS training to both technical and functional staff and to staff at both the SEA and LEA levels. Examples of user groups trained include system administrators, report developers, functional leads, and data submitters and approvers.
Lisa Keegan, Trainer	Responsible for creating the training and knowledge transfer documentation and delivering the associated sessions.	Lisa Keegan has served as a Training Lead on SLDS projects for Texas and Colorado. She has developed in-depth training materials for both instructor-led sessions and Web-based modules and successfully transferred her knowledge to the internal teams by conducting Train-the-Trainer sessions and developing knowledge transfer documentation.
Lisa McNicholas, Trainer	Responsible for creating the training and knowledge transfer documentation and delivering the associated sessions.	Lisa McNicholas is the Manager of eScholar's Customer Education. She has developed similar training and knowledge transfer materials for the Mississippi Department of Education, Texas Education Agency, Pennsylvania Department of Education, Santa Ana Unified School District, and New York State Education Department. Lisa has also been the lead for training materials and on-going learning content for school districts in Prince George County, MD, Fort Wayne, IN, Cumberland County, NC in addition to the Nebraska Department of Education.

Figure 4.4.2-6. Previous Documentation, Training, and Knowledge Transfer Experience of the Deloitte/eScholar Staff.
Our team members have significant SLDS specific experience developing documentation and delivering training and knowledge transfer to state education agencies.

4.4.2.2.d Installation Plan and Transfer Plan

RFP Reference: Section 4.4. Qualifications and Experience, page, 29

4.4.2.2 For the successful Vendor to provide a DWRS that has appropriate levels of support and training for the WVDE technical staff. The specifications associated with this objective include the following:

- 4.4.2.2.d. Provide a detailed narrative of the anticipated installation schedule, including a proposed knowledge transfer plan.

Using eScholar's CDW eliminates the need for lengthy and expensive design and development phases, thereby reducing the overall project timeline, cost, and risk. For this reason, and due to our team's significant experience implementing the eScholar CDW as part of similar solutions for other state education agencies, we propose to complete this project in just nine months. Please see *Section 4.4.5, Goal V: Project Management* for a detailed description of our proposed approach to the WVDE SLDS project, including the overall project schedule.

Our approach to WVDE SLDS knowledge transfer focuses on techniques to transfer necessary skills and responsibility of the system components to reduce WVDE's reliance on contractor support. It involves both formal and informal activities that help confirm the "transfer to" resources are ready to take the work over. Please see *Section 4.4.6, Goal VI: Transition Strategy* for a detailed description of our strategy to determine WVDE staff are ready to support the operation and maintenance of the SLDS once the implementation project is complete.

4.4.3 Goal III: Analysis and Reporting

RFP Reference: Section 4.4. Qualifications and Experience, page, 29-30

4.4.3. As part of the WVDE's PK-12 SLDS initiative, the WVDE seeks to enhance stakeholders' abilities to make informed, data-driven decisions from a single, valid source of information to improve West Virginia's education system. One way to do this is through clear, informative, and intuitive reports that use the state's vetted, certified education data accessible to stakeholders at all levels of the system, while adhering to all required security and privacy requirements set forth in this RFP.

The reports created through the DWRS will meet multiple purposes, including but not limited to:

- Federal and state reporting
- Supporting policy decisions
- Informing program development and evaluation
- Within and cross-state comparisons
- Linking validated data that are collected within and outside the WVDE's transactional system
- Providing on-the-fly and static reporting

Reports should be designed in such a way that they provide information about students, schools, counties, and the state using data available in the DWRS to help inform decision-making. The WVDE seeks, through the use of an interoperable electronic platform, to produce data-based reports that are timely, relevant, and usable to stakeholders including students, teachers, parents, administrators, policymakers, and the general public in traditional, as well as, innovative formats. Interpretability of this information will be enhanced through innovative graphic displays and print-optimized files.

Deloitte will use the IBM Cognos 10 suite (Cognos) as the business intelligence tool for the WVDE SLDS solution. Deloitte's Cognos Business Intelligence practice has provided services in support of more than 200 Cognos implementations worldwide, spanning local, state and federal government, as well as industries such as consumer products, financial services, life sciences and health care, and manufacturing.

We have successfully implemented Cognos in 4 of our 8 SLDS implementations. We have built a library of over 1000 Cognos SLDS reports at other SEAs which can be leveraged during the implementation of the in-scope reports for the WVDE SLDS. The library includes a wide variety of reports from Adequate Yearly Progress (AYP), Highly Qualified Teachers (HQT), programmatic reports for domains such as student demographics, enrollment, program participation, special education details, discipline, assessment, graduation/dropout, and more. We also will leverage the eScholar framework for Cognos, which can really accelerate the development of new reports from the SLDS.

- Deloitte has performed over 200 successful Cognos implementations world-wide as well as employs over 1,200 Business Analytics trained practitioners
- Deloitte has successfully used Cognos in 5 of our 8 SLDS implementations
- Key accelerators for report development include our amassed library of over 1,000 Cognos reports and cubes, the eScholar Cognos metadata layer (framework) and the eScholar EDEN solution

Deloitte brings to WVDE significant technical and business experiences that are directly relevant to this project. Our strategic alliance with IBM, extensive experience implementing reports using Cognos at other SEAs and experience in the state of West Virginia delivers an exceptional and unique value proposition to WVDE and reduces project risk.

4.4.3.1 Flexible Reporting Tools

Cognos offers a robust, scalable and feature-rich suite of analytical and reporting solutions for state education agencies and LEAs. Cognos is Web-based and combines enterprise-wide reporting needs into a single application.

With the eScholar CDW, Cognos delivers easy-to-use standard reports, dashboards and ad hoc reporting capabilities. The Cognos solution delivers robust decision support features for various users, from state-level analysts to LEA administrators to teachers. Cognos allows users to create complex analyses or basic reports by means of drag-and-drop and point-and-click functionality, rather than requiring knowledge of a programming language. The tool provides numerous calculations and statistical functions as well as graph and chart types. Report results can be delivered in a variety of ways, including by email or by scheduling to be run in off-hours.

Based on our experience in implementing SLDS solutions at other states, we strongly believe that the Cognos suite in conjunction with the eScholar CDW fully supports WVDE's reporting needs.

Reports that can be created through the SLDS

Federal Reporting

eScholar's EDEN/EDFacts Solution provides a comprehensive solution to collect and review the data required for the federal EDEN/EDFacts data collection. The eScholar EDEN Solution includes functionality to generate files in the EDEN/EDFacts required format with file naming conventions automatically applied.

eScholar has developed processes for compiling EDEN required data from data residing in the eScholar CDW or data from other sources. From the eScholar CDW, data is extracted, aggregated as necessary, and loaded into EDEN staging tables (the eScholar EDEN Data Mart) for easy review by WVDE Program Offices.

Alternatively, data may be supplied from sources outside the CDW and loaded to the eScholar EDEN Data Mart. Once the data is reviewed, eScholar's EDEN module processes apply the final EDEN formatting rules and file naming conventions and create files that can be successfully submitted to U.S. Department of Education (USED).

This EDEN component will allow WVDE to concentrate on the content and quality of the underlying data, rather than on the mechanics of applying the necessary formatting, calculation, aggregation, and file naming rules to each of the approximately 100 required EDEN files per school year. Since the EDEN file specifications may change from year to year, eScholar updates these processes to stay in compliance with changing USED requirements. An added advantage of preparing EDEN data through the eScholar EDEN Data Mart is that once loaded, that data can be stored indefinitely and analyzed on demand and longitudinally from a central repository.

State Reporting

We have helped states with the development of a number of complex state level reports including accountability reports such as Annual Yearly Progress (AYP), State of the Schools Reports, Enrollment/Funding reports as well as Highly Qualified Teachers (HQT) reports. We will work with WVDE to identify reporting requirements for state level reports.

Supporting Policy Decisions and Informing Program Development and Evaluation

We have helped SEAs implement a number of OLAP cubes, dashboards and static reports that provide data to make informed policy decisions. The reports help identify trends over time and across different student cohorts. Examples of such reports include Dropout reports, Graduation reports, and State assessment reports.

We have also developed several reports that provide departments within SEAs insight into the student population they are serving and how they can be served better. Examples of reports include reports for the Special Education, Migrant and English as Secondary Language programs.

Within/Cross-state comparisons and Linking data outside of WVEIS

We have helped LEAs and RESAs benchmark themselves against other LEAs and RESAs within the Commonwealth of Pennsylvania through the High School Feedback reporting initiative. The initiative also involved sourcing data from external sources such as the National Student Clearing House data, which was incorporated into the P-16 SLDS, to identify high school students going on to enroll and obtain a degree at postsecondary institutions.

Accomplishing cross-state comparisons requires availability of data from other states, which can often be challenging. If data from other states is made available, we believe that we can develop reports similar to the High School Feedback reports which show benchmarks at an aggregate level.

Providing on-the-fly and static reporting

Deloitte has significant experience leveraging the eScholar Framework for Cognos (metadata layer) or building custom metadata layers to support ad hoc reports and static reports for other SEAs. For the WVDE SLDS, we plan to use the eScholar Framework for Cognos to support both ad hoc reporting and static reporting.

The eScholar Framework for Cognos will help power users at the state level develop their own reports and publish them to the reporting community without having to understand the complexities of the data model as well as joins between tables. We propose that LEA and school users use OLAP cubes in Cognos to slice and dice their data. We anticipate each OLAP cube to answer several business questions that the LEA and school users may have.

We have a catalog of over 1000 static reports which leverage the eScholar framework for Cognos as part of our SLDS practice. Examples of static reports include Adequate Yearly Progress (AYP) and Highly Qualified Teachers (HQT) in addition to programmatic reports for domains such as student demographics, enrollment, program participation, special education details, discipline, assessment, graduation/dropout, and more.

We plan to develop the five P20 extracts out of the SLDS using Cognos by leveraging its exporting capabilities in various formats such as CSV, text files, etc.

myTrack (Optional Service)

eScholar also provides a comprehensive solution, eScholar myTrack, that goes beyond data dashboards and is designed to directly help students succeed.

- The dashboard product includes Administrator, Teacher and Student/Parents access with a dashboard homepage that is uniquely geared to the needs of each distinct user.

- The configurable data dashboards provide year-to-year comparison views
- Strand and item analysis dashboards for assessments
- A data-informed goal management system that allows users to set, track, and evaluate student goals
- It includes a configurable early warning indicator system that allows your district to define your indicators and the threshold for those indicators by grade level
  - Research based indicators have been included such as attendance, grades and discipline, but others indicators are also configurable.
- Custom student groups can be set based on a variety of student criteria and attributes

This solution is an optional service that can be procured at an additional cost. Please refer to the cost section of the proposal for details on pricing.

Our Cognos Expertise

Deloitte - IBM Alliance

Deloitte and IBM have a strategic alliance relationship that has grown since its inception in 2000. The alliance combines the strengths of both organizations to help global enterprises and government agencies in their efforts to address their toughest business issues. This "smarter teaming" approach results in better service and higher value for our joint clients.

Recognized by IBM as a Premier Business Partner and a channel to market for its technology, Deloitte has access to a wide variety of hardware, software, and services resources as well as the capability to leverage IBM education and complementary tools. Having such access to these IBM resources allows Deloitte to more effectively help clients in their efforts to identify and resolve technology issues as they arise, facilitating the reduction of development time and more effective management of risk.

Deloitte's additional Business Analytics credentials include:

- More than 1,200 Cognos Business Analytics trained practitioners
- Named a Cognos Global Alliance Partner of the Year or Global Systems Integrator of the Year for five consecutive years
- Awarded IBM's highest alliance distinction, the Global Alliance Excellence Award for Business Analytics
- Recognized as a Premier Business Partner of IBM

To serve our clients, both Deloitte and IBM have invested significant time, money, and people to build and strengthen our alliance.

- **IBM Center of Excellence (COE)** – Deloitte has an IBM Center of Excellence at its US India headquarters in Mumbai. The highly trained IBM COE staff has the skills and experience needed to create innovative solutions, tools, and accelerators around the IBM Software suite of products.
- **Global IBM Business Analytics and Information Community of Practice** – The dedicated and global IBM CoP, with members from more than 12 countries, supports excellence in the delivery of Deloitte engagements via a thriving community of our practitioners who specialize in IBM BA & IM technologies.

- **Dedicated IBM alliance team** – Our clients benefit from having a dedicated alliance team to facilitate the development and delivery of services and solutions, including support for enhanced project delivery, effective technology fit and integration, and lower overall costs.
- **Access to key IBM resources** – IBM provides Deloitte with access to a variety of hardware, software, services resources, as well as IBM education and complementary tools.
- **Technology investments** – To help reduce clients' development costs and accelerate time to market, IBM has invested hardware, software, and technical support into Deloitte's Solutions Network (SNET) technology infrastructure.
- **Education and enablement support** – The alliance also enables Deloitte to take full advantage of education and training on the latest IBM software and hardware.
- **Joint Solutions** – Deloitte and IBM work closely together to develop pre-configured, pre-tested, industry-specific services and solutions. Deloitte's portfolio of IBM-enabled solutions helps accelerate project start-up while reducing project cost and risk.

Our Cognos SLDS work

Deloitte has used Cognos in 4 of our 8 SLDS implementations and has amassed a library of over 1,000 reports and cubes for use by SEAs and LEAs. This library will enable us to create customized reports and cubes for WVDE end users much faster and with less risk. We plan to use the eScholar framework for Cognos which is a metadata layer on top of the eScholar CDW to aid rapid development, promote consistency and increase maintainability of reports. Our solution also includes the eScholar EDEN/EdFacts solution which will address WVDE's federal reporting needs.

As a sample of our Cognos experience, we have completed Cognos business intelligence implementations for the Pennsylvania Department of Education; New Mexico Public Education Department; Maryland State Department of Education; and Nebraska Department of Education.

Our Cognos work at WV DHHR

Deloitte has successfully delivered Cognos solutions to other West Virginia state agencies. Based on Deloitte's deep knowledge and understanding of driving issues, limitations, and complications of current systems and business processes faced by DHHR, Deloitte developed an Integrated Eligibility Analytics platform designed to align program and policy and integrate data informatics, operational guidance, and outcomes-based management approaches into day-to-day operations. With these combined capabilities, the Integrated Eligibility Analytics solution supports operations that are more efficient by drawing upon a common foundation for proactive sharing of decision support information. With this approach, DHRR can better help identify impact areas, develop interventions, and improve outcomes for their constituents.

Our approach leverages both the Cognos 10 platform for reporting, dashboarding, scorecarding, predictive analytics, fraud detection, and program integrity. These analytic platforms are designed to offer DHRR the ability to explore virtually any data, in virtually any combination and over virtually any time period that the data spans with a broad range of drill-down and slice-and-dice functionality. This approach can help provide DHHR staff the ability to manage by exception and take an outcomes-based approach to providing services to those most vulnerable in our society.

Reporting capabilities range from the federally mandated reports, such as the ACF 199 and ACR 812, which track TANF work program requirements, to managing metrics that if not met, can result in federal sanctions such as the Work Participation Rate (WPR) and SNAP error rate. Following a 'bottom-up' approach, our analytics approach is designed not only to provide granular case level details for case workers to take immediate action but also provides summary-level statistics, in various formats, for supervisors, policy staff, and DHHR executives to help monitor and enhance outcomes for their constituency.

4.4.3.1.a Development, Implementation, and Training of Reporting Tools

RFP Reference: Section 4.4. Qualifications and Experience, page, 30

4.4.3.1 For the successful Vendor to develop flexible reporting tools that can pull from mapped elements within the data model and are integrated with the proposed DWRS solution for the WVDE. To meet this objective, provide responses for the following:

- 4.4.3.l.a. the proposed development, implementation, and training strategy to provide reporting tools with Web-based interfaces;

Our team has collaborated with several state education agencies, including the Pennsylvania Department of Education and New Mexico Public Education Department to transform their data into actionable information using Cognos and eScholar. We have developed over 1,000 eScholar-based reports and OLAP cubes across a wide range of education data domains in Cognos. In addition, Deloitte has developed dozens of data validation reports. These reports provide confidence in the data that has been loaded to the SLDS. The reports include checks on required and conditionally required fields, valid values, and relationships between fields.

We will work with WVDE in the requirements phase of the project to identify the 35 reports to be developed by Deloitte and then determine which of those 35 can leverage a report in our Cognos library. We have assumed 35 reports (10 simple, 15 medium, 10 complex), 5 OLAP cubes and 5 P20 extracts as part of the scope. Each OLAP cube and P20 extract is assumed to contain no more than 12 dimensions and 20 columns respectively. We believe that OLAP cubes will replace the need for LEA and school users to develop their own reports as they can answer hundreds of business questions. It will eliminate the need to train the LEA and school users on how to build ad hoc reports.

Additionally, we will also leverage the eScholar Framework for Cognos for reporting, which is a pre-defined metadata layer which sits on top of the eScholar CDW data model. This will enable expedited development of new reports within our scope as well as future reports that will be developed by WVDE. This metadata layer will also lay the foundation to address the ad hoc reporting requirements of WVDE. All reports developed and implemented as part of the SLDS solution will be published to the Web-enabled Cognos portal – Cognos Connection.

Please refer *to Section 4.4.4* for more information on our training strategy.

4.4.3.1.b Proposed Reporting Tool

RFP Reference: Section 4.4. Qualifications and Experience, page, 30

4.4.3.1 For the successful Vendor to develop flexible reporting tools that can pull from mapped elements within the data model and are integrated with the proposed DWRS solution for the WVDE. To meet this objective, provide responses for the following:

- 4.4.3.I.b. the proposed reporting tool and its features

Cognos Business Intelligence provides reports, analysis, dashboards and scoreboards to help support the way people think and work when they are trying to understand business performance. Users can freely explore information, analyze key facts and quickly collaborate to align decisions with key stakeholders. The Cognos Business Intelligence suite is fully compatible with Microsoft SQL Server and the eScholar CDW products, which are the other products in our SLDS solution. It will provide stakeholders with timely access to essential data and data analysis tools to support data-driven educational decision making at levels that can ultimately lead to improved student achievement.

The Cognos Business Intelligence suite has the following components:

Cognos Connection

- Cognos Connection provides a single access point to corporate data available in Cognos software.
- It is completely Web-enabled allowing it to be accessed from multiple locations and geographies

Reports

- Cognos Business Intelligence includes professional report authoring capabilities that are easier to use and that help minimize the effort for report authors.
- Users can create their own impromptu queries or customize existing reports
- Collaborative reporting features built into Cognos Business Intelligence help people communicate with others to drive decisions and gain additional insight.
- Users can access reports on mobile devices and they can interact with each page as the report loads rather than wait for the entire report to download to the mobile device.

Dashboards

- With the dashboard capabilities of Cognos Business Intelligence, users can assemble and personalize dashboard views to support individual decision-making styles.
- Historical data alongside data in motion and what-if scenarios provide an extensive view of performance.
- Dashboards can be made portable to support decisions where and when they need to be made.

Analysis

- With Cognos Business Intelligence analysis capabilities, users can use analytical reporting, trend analysis, statistical analysis and more to explore information easily and intuitively.
- Business and financial analysts can assess your immediate business situation with more advanced, predictive or what-if analysis.
- Support for operational and strategic decision-making cycles help can engage the right people at the right time for analysis.

- Options for mobile, offline interactive dashboard and analysis, along with versions for Microsoft Office software are available.

Collaboration

- Capabilities for forming communities, capturing annotations and opinions and sharing insights help groups streamline and improve decision-making.
- Workflow and task management capabilities are designed to connect people and coordinate activities seamlessly.
- Users can share insights and solicit ideas with a broad set of social networking capabilities from IBM Connections.

We recognize that WVDE is seeking a tool for analysis and interpretation. The Cognos 10 reporting components – Report Studio and Query Studio allow the report developers and power users the ability to convert the raw data in reports into various different graphical formats such as bar charts, pie charts, etc. Our training team will help WVDE and its users gain a better understanding of how to interpret the reports that we will be developing as part of our scope. The training team will also train the report users and provide training materials on how to use the various components of Cognos and how to convert raw data into graphical formats.

4.4.3.1.c Steps to Develop, Test, Monitor, Support and Revise Reporting Tool

RFP Reference: Section 4.4. Qualifications and Experience, page, 30

4.4.3.1 For the successful Vendor to develop flexible reporting tools that can pull from mapped elements within the data model and are integrated with the proposed DWRS solution for the WVDE. To meet this objective, provide responses for the following:

- 4.4.3.1.c. the steps proposed to develop, test, monitor, support, and revise as necessary, a reporting tool that can support the target number of concurrent and total users while applying suppression rules;

The Deloitte team will work with WVDE during the requirements phase to determine the reporting requirements and the types of reports that need to be developed. We will work with WVDE during the design phase to develop detailed specifications for each report pointing to the staging and SLDS databases. These detailed specifications will be included as part of the reporting design deliverable and will be reviewed and approved by WVDE.

The reports will be developed using the agreed upon development standards based on the signed-off detailed design specifications. The Deloitte/eScholar team will perform thorough unit testing and integration testing to validate that the reports display the desired data and meet the detailed design specifications. Our solution has supported over 2500 report users across 800 LEAs with over 1.8 million students. We are confident that it will be able to support the targeted user population and concurrent users at WVDE.

WVDE will then perform User Acceptance Testing (UAT) on each report to validate that the report meets the detailed design reporting specifications. Any issues or defects found during UAT will be addressed within the agreed upon time frame.

Please refer to *Section 4.4.1.8* for our detailed testing strategy.

4.4.3.1.d Custom Reports and Privacy

RFP Reference: Section 4.4. Qualifications and Experience, page, 30

4.4.3.1 For the successful Vendor to develop flexible reporting tools that can pull from mapped elements within the data model and are integrated with the proposed DWRS solution for the WVDE. To meet this objective, provide responses for the following:

- 4.4.3.1.d. how the tool allows all users to build custom reports while also applying privacy requirements, suppression rules, and user-access roles;.

The Cognos Business Intelligence suite offers a number of security features to support custom reports through ad hoc reporting. Cognos Administrators can define which security roles can view and build reports. Additionally, subject area level and row-level security can be applied in the metadata layer based on the different security roles to restrict the information that users can see and include in a custom ad hoc report.

The Deloitte team has extensive experience developing this type of security for other SEAs. The following are some of the examples of security we have implemented at other SEAs:

- Restricting LEAs and Schools to accessing only their data and only building custom reports based on their data
- Suppressing or masking certain Personally Identifiable Information (PII) fields such as SSN
- Restricting one SEA department from viewing another SEA department's data

A case in point is the Feedback reporting initiative that we successfully completed for the Pennsylvania Department of Education. Deloitte was tasked with developing actionable reports leveraging data collected from postsecondary institutions in the P-16 SLDS to provide meaningful feedback to the LEAs on the trajectory of their students upon leaving high school. We conducted several workshops with key stakeholders throughout the state including principals, assistant principals, superintendents and assistant superintendents to determine the content, layout and security requirements for these reports.

The stakeholders provided us the following security requirements:

- Limit RESA equivalent intermediate units, LEAs and schools to see their own detailed data
- RESA equivalent intermediate units, LEAs and schools could view aggregated summary data for other regions
- Low N values were to be suppressed to prevent individual students from being identified
- Key PII information were excluded from these reports, but could be utilized in the back-end to perform data matching with external data extracts (example SSN)

We were successfully able to implement these Feedback reports statewide in PA while adhering to the security requirements listed above.

The Deloitte/eScholar team will work closely with WVDE during the requirements phases to finalize the security requirements and devise a security approach for reporting. We will be able to leverage our experience from implementations such as the Feedback reporting initiative to help guide our discussion around reporting security.

4.4.3.1.e Reporting Tools and Security Access

RFP Reference: Section 4.4. Qualifications and Experience, page, 30

4.4.3.1 For the successful Vendor to develop flexible reporting tools that can pull from mapped elements within the data model and are integrated with the proposed DWRS solution for the WVDE. To meet this objective, provide responses for the following:

- 4.4.3.I.e. how the proposed reporting tool can provide varying levels of security access for running reports, creating reports, publishing reports, and any other needed reporting functionality for users;

The Cognos Business Intelligence provides a security architecture that is flexible and compatible with an organization's existing security model. It is easily integrated with authentication and cryptographic providers.

Cognos BI security involves the following:

- Cognos Application Firewall - Cognos Application Firewall validates and filters incoming and outgoing traffic at the dispatcher layer
- Cognos authentication services - Authentication is the process of identifying individuals before allowing them to log on
- Cognos authorization services - Authorization is the process of granting or denying access to data , and specifying the actions that can be performed on that data, based on a user identity
- Cryptographic services - Cryptographic services determine that Cognos BI communications and sensitive data are secure

Cognos also has its own namespace that can be used to define users, groups, and roles used for authentication in the absence of an identity management solution, which is the case with WVDE. Deloitte will work with WVDE to identify the users, groups and roles necessary to implement the SLDS reporting solution.

Cognos includes various components – Cognos Connection, Report Studio, Analysis Studio and Query Studio. These components or tools are implemented to different user groups to accommodate multiple user levels – from the power to the casual user. The table below defines the various Cognos user types that the Deloitte/eScholar Team anticipates will be implemented for the SLDS. We will work with WVDE during the requirements phase of the project to validate and modify these user types and privileges as necessary.

Cognos User Type	Description
Programmer/Administrator	State-level Cognos programmer responsible for developing and distributing reports and OLAP cubes to end-users. Has access to Cognos components. Also responsible for the maintenance and support of the Cognos SLDS solution.
State Analyst	State-level analyst that has been trained to create their own ad hoc complex queries using Query Studio and to perform multi-dimensional and what-if analysis using Analysis Studio. This user type can also view parameterized pre-defined reports and dashboards.
Consumer	WVDE designated State-level, LEA-level, school level and RESA-level resources that has not received advanced training. Their access is limited to consuming or viewing pre-defined parameterized reports, OLAP cubes and dashboards through Cognos Connection.

Table 4.4.3-1. Anticipated Cognos User Types.

We anticipate that aggregate reports will be provided to the general public in PDF format. Please refer to *Section 4.4.3.2.c* for more information.

4.4.3.1.f Scalability

RFP Reference: Section 4.4. Qualifications and Experience, page, 30

4.4.3.1 For the successful Vendor to develop flexible reporting tools that can pull from mapped elements within the data model and are integrated with the proposed DWRS solution for the WVDE. To meet this objective, provide responses for the following:

- 4.4.3.l.f. how the product is scalable.

Scalability is the ability of a system to adapt to increased processing demands in a predictable way, without becoming too complex, expensive, or unmanageable. As the SLDS solution is deployed to larger numbers of users, often in different locations, scalability becomes increasingly important.

Cognos BI was designed for scalability. It scales vertically using more powerful computers, and horizontally using a greater number of computers. Our solution in PA supports over 800 LEAs with over 2500 reporting users and 1.8 million students and has been in production for several years.

There are different scalability options available:

- **Web Server and Gateway Scalability**
  All Web communication in Cognos BI is through a Cognos BI gateway installed on a Web server. To increase the scalability of the Cognos BI system, the Web server can be run on a larger computer. The Cognos BI gateway can be installed on more than one Web server and configured to leverage load balancing features.
- **Cognos BI Server Scalability**
  The Cognos BI application server has one or more Cognos BI servers. Each Cognos BI installation contains Content Manager to manage data stored in the content store. Each Cognos BI server contains a dispatcher that runs the Cognos BI presentation service, batch report and report services, job and schedule monitor service, and log service.

4.4.3.1.g Design Principles for Electronic and Print-on-Demand Reports

RFP Reference: Section 4.4. Qualifications and Experience, page, 30

4.4.3.1 For the successful Vendor to develop flexible reporting tools that can pull from mapped elements within the data model and are integrated with the proposed DWRS solution for the WVDE. To meet this objective, provide responses for the following:

- 4.4.3.l.g. the design principles, design elements, proofing process, style guide, and signature sign-off procedures for electronic and print-on-demand reports; and

The Deloitte team will work with WVDE during the requirements phase to determine the high-level reporting requirements and the types of reports that need to be developed. We will work with WVDE during the design phase to develop detailed specifications for each report/metadata layer pointing to the staging and SLDS databases.

We propose using a metadata layer (Cognos framework) to enable developers, and power users to develop their own reports. The metadata layer allows users to simply drag and drop data elements from the metadata layer without having to understand the data model and the required joins between tables. The metadata layer promotes consistency of data across different reports and reusability. We will also work with WVDE to finalize reporting standards and look and feel including standardized headers and footers to be followed by each report.

The detailed report/metadata layer specifications will include the data elements to be included, formatting details, calculation details, sorting, grouping, summaries (totals/averages), report title, report parameters, and logic. The specifications will also include detailed mock ups of each report. These detailed specifications will be included as part of the reporting design deliverable and will be reviewed and approved by WVDE.

WVDE will perform User Acceptance Testing (UAT) on each report to validate that the report meets the detailed reporting specifications. WVDE will sign-off on the reports upon the successful validation of these reports during UAT.

4.4.3.1.h Thin or Thick Client

RFP Reference: Section 4.4. Qualifications and Experience, page, 30

4.4.3.1 For the successful Vendor to develop flexible reporting tools that can pull from mapped elements within the data model and are integrated with the proposed DWRS solution for the WVDE. To meet this objective, provide responses for the following:

- 4.4.3.1.h. the capacity that the creation and modification of reports can also be carried out via a thin client or thick client. Specify whether the proposed reporting tool includes a thick client as well as a thin client, and if so describe which features are available in each

Outside of the initial metadata layer development (aka Cognos framework) and building OLAP cubes, which require a thick client – Framework Manager and Cognos Transformer respectively, functions within Cognos can be performed through a web browser. Users can log into the Cognos Connection web portal and perform the following activities based on their security role and user type without any additional software except for the web browser:

- View pre-defined reports, dashboards, and analysis
- Edit/Develop pre-defined reports and dashboards
- Develop custom ad hoc reports
- Schedule reports and dashboards
- Configure security
- Perform server administration
- Perform migration from one environment to another

4.4.3.2 Report Capabilities

4.4.3.2.a Describe in detail how the solution allows users to drill up, down, and through data

RFP Reference: Section 4.4. Qualifications and Experience, page, 30

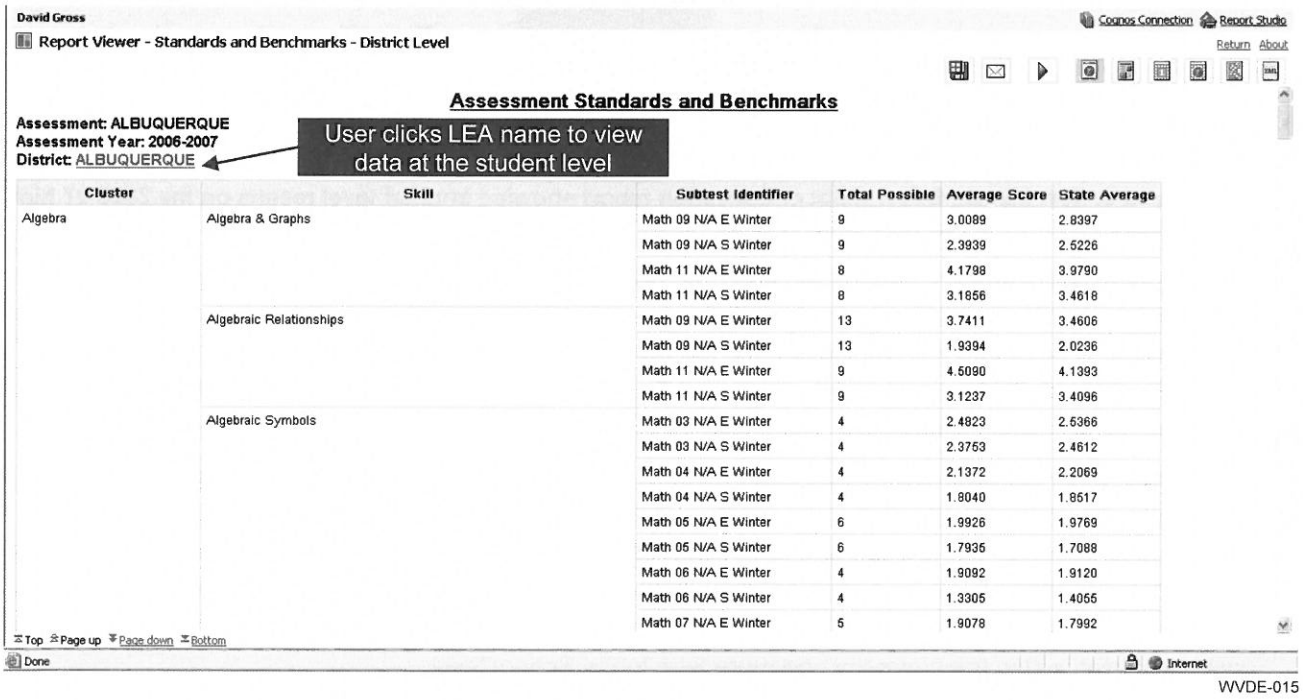
4.4.3.2 To provide reports that have drillability up, down, and through data, and export capabilities, based on role-level access, as specified in Goal 1. To meet this objective:

- 4.4.3.2.a. describe in detail how the proposed solution allows users to drill up, down, and through data in any relevant report while adhering to user access roles, privacy requirements, and suppression rules;

Drill up/down is inherent in Cognos and based on hierarchies that are set up in the metadata layer. Users can simply point-and-click on any drillable or navigable report object: A drill down will further filter the data to the next level within the hierarchical drill down (i.e. from State to district). In addition, asymmetrical drilling is

available where users can expand/collapse different branches of the hierarchy. Drill through can be set up from one report to another based on context i.e. click on a district name in a summary report, and drill through to a detailed student information for that district. Drill through is set up through an easy to use web interface. In addition to leveraging hierarchy structures (e.g. Year-Semester-Month-Week-Day) and drillable/navigable charts, the end user also has the ability to navigate across reports in a parent/child paradigm. Cognos security is designed to always validate whether the user has access to the object they are drilling up, down or through to.

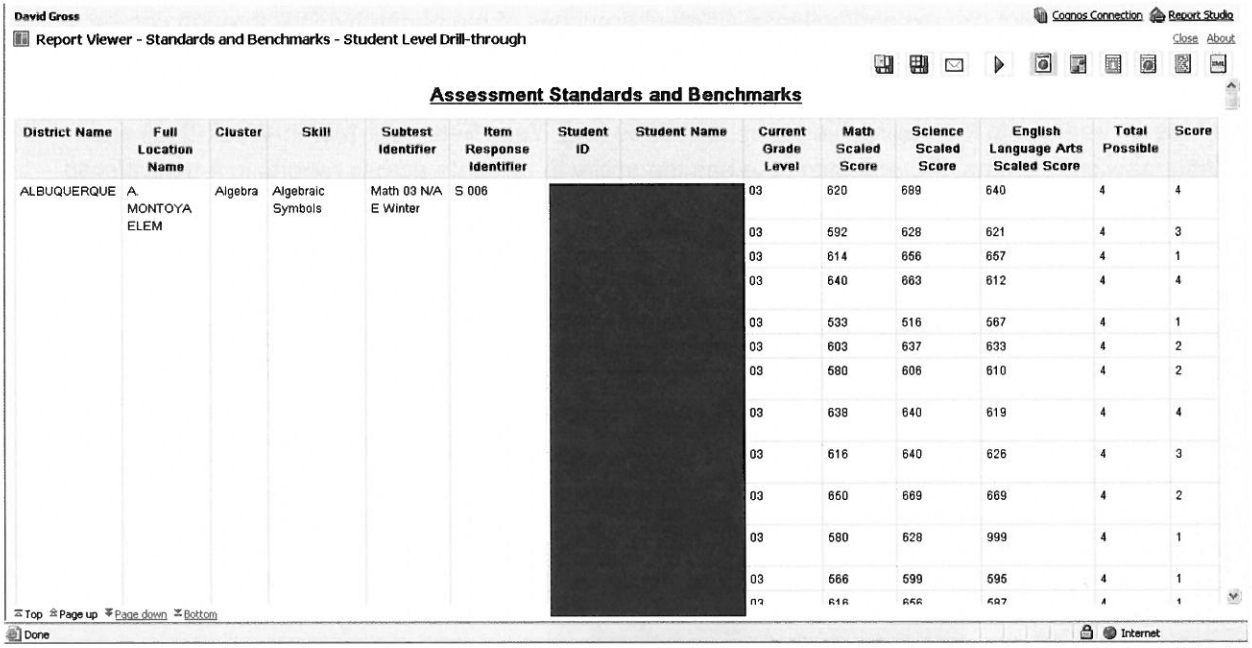
The following report screen shots provide an example of ability for a user to drill-down to additional detail by clicking on a chart or a graph within a report. The first report shows both the average score for the Albuquerque School District on the 2006-2007 New Mexico high-stakes assessment as well as the state average score. These scores are broken down by the assessment "cluster" and, within that, the "skill". By clicking on the LEA name in the first report the user then is presented with the second report which presents the same data but at the student level.



Cluster	Skill	Subtest Identifier	Total Possible	Average Score	State Average
Algebra	Algebra & Graphs	Math 09 N/A E Winter	9	3.0089	2.8397
		Math 09 N/A S Winter	9	2.3939	2.5226
		Math 11 N/A E Winter	8	4.1798	3.9790
		Math 11 N/A S Winter	8	3.1856	3.4618
	Algebraic Relationships	Math 09 N/A E Winter	13	3.7411	3.4606
		Math 09 N/A S Winter	13	1.9394	2.0236
		Math 11 N/A E Winter	9	4.5090	4.1393
		Math 11 N/A S Winter	9	3.1237	3.4096
	Algebraic Symbols	Math 03 N/A E Winter	4	2.4823	2.5366
		Math 03 N/A S Winter	4	2.3753	2.4612
		Math 04 N/A E Winter	4	2.1372	2.2069
		Math 04 N/A S Winter	4	1.8040	1.8517
		Math 05 N/A E Winter	6	1.9926	1.9769
		Math 05 N/A S Winter	6	1.7935	1.7088
		Math 06 N/A E Winter	4	1.9092	1.9120
		Math 06 N/A S Winter	4	1.3305	1.4055
		Math 07 N/A E Winter	5	1.9078	1.7992

WVDE-015

Figure 4.4.3-2. New Mexico Department of Education report showing LEA-level results on the 2006-07 high-stakes assessment by the assessment "Cluster" and "Skill".



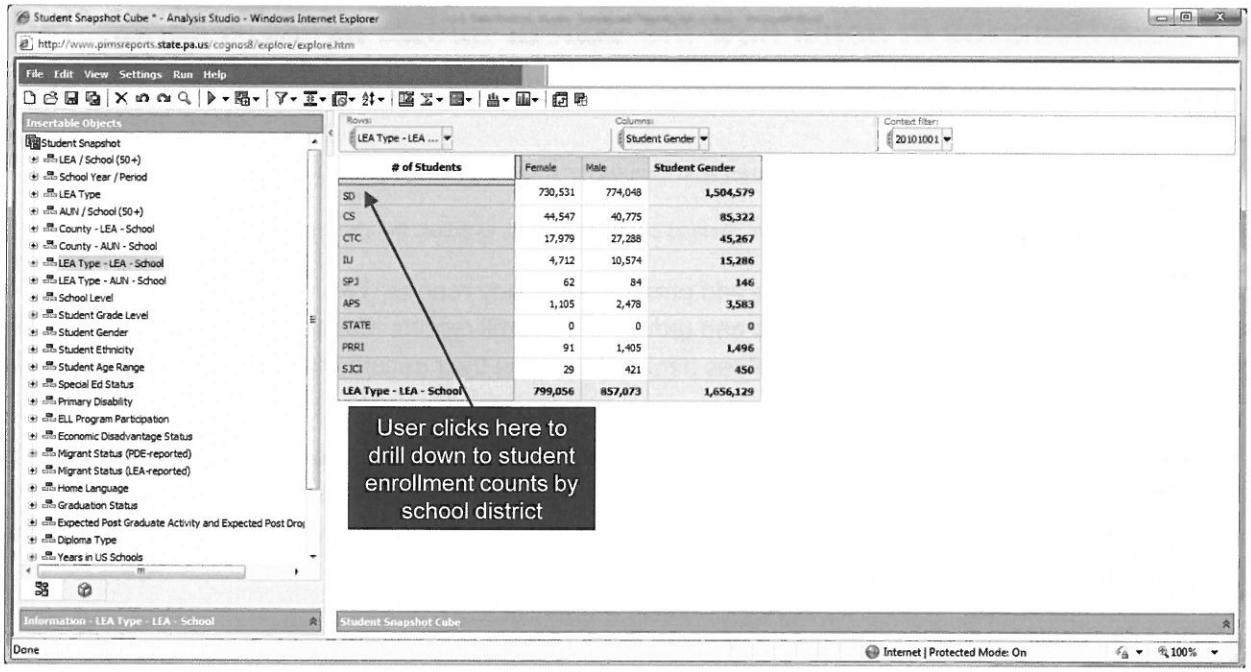
District Name	Full Location Name	Cluster	Skill	Subtest Identifier	Item Response Identifier	Student ID	Student Name	Current Grade Level	Math Scaled Score	Science Scaled Score	English Language Arts Scaled Score	Total Possible	Score
ALBUQUERQUE	A. MONTOYA ELEM	Algebra	Algebraic Symbols	Math 03 N/A E Winter	S 006	[redacted]		03	620	689	640	4	4
								03	592	628	621	4	3
								03	614	656	657	4	1
								03	640	663	612	4	4
								03	533	516	567	4	1
								03	603	637	633	4	2
								03	580	606	610	4	2
								03	638	640	619	4	4
								03	616	640	626	4	3
								03	650	669	669	4	2
								03	580	628	999	4	1
								03	566	599	595	4	1

WVDE-016

Figure 4.4.3-3. New Mexico Department of Education report showing student-level results on the 2006-07 high-stakes assessment by the assessment "Cluster" and "Skill".

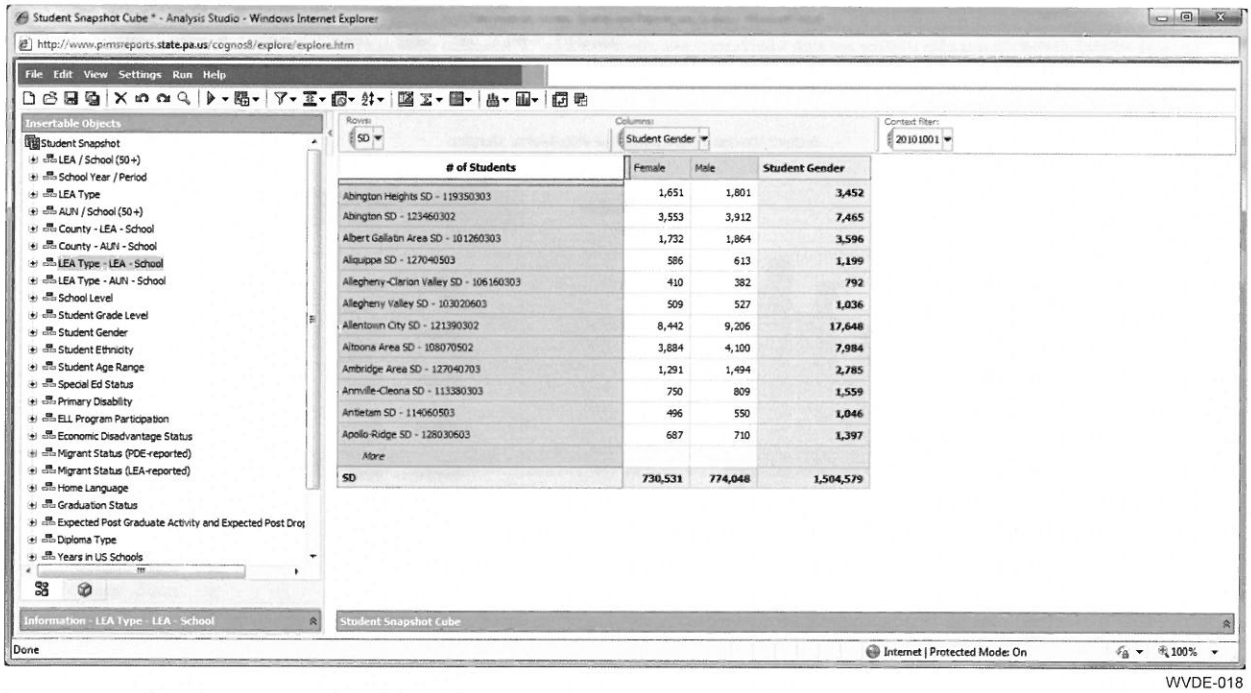
With Cognos, users employ simple drag and drop and point and click techniques to analyze data from any dimension and drill into detail. Users can drill down, up or across to analyze student performance on the fly. Drill down/up is based on hierarchies that are set up in the Cognos metadata layer. Users can simply point-and-click on any drillable or navigable report object. A drill down will further filter the data to the next level within the hierarchical drill down (i.e. from State to LEA).

The screen shots below provide a drill down example. These screen shots are from the Student Snapshot OLAP cube developed for the Pennsylvania Department of Education. The first screen shot shows the number of students by the Gender and LEA Type (SD – school district, CS – charter school, etc.) dimensions for the October 2010 student collection. In the subsequent screen shot the user clicked on "SD" within the LEA Type dimension to drill down to view the student counts at the School District level. From there a user could drill down within the hierarchy one more time to the School level.



WVDE-017

Figure 4.4.3-4. Pennsylvania Department of Education Student Snapshot Cube showing October 2010 student enrollment counts by the LEA Type and Gender dimensions.



WVDE-018

Figure 4.4.3-5. Pennsylvania Department of Education Student Snapshot Cube showing October 2010 student enrollment counts by School District and Gender.

4.4.3.2.b Describe in detail how the Vendor allows users to configure reports to adjust the parameters

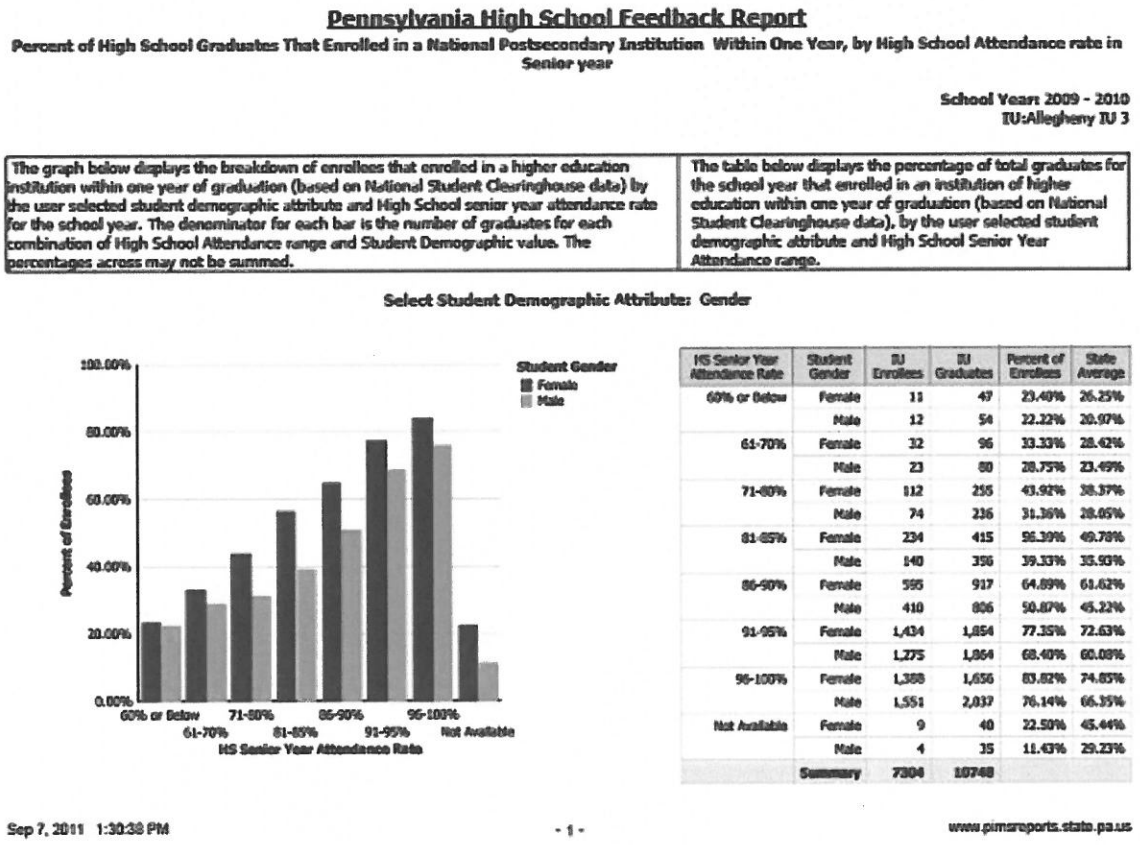
RFP Reference: Section 4.4. Qualifications and Experience, page, 30

4.4.3.2 To provide reports that have drillability up, down, and through data, and export capabilities, based on role-level access, as specified in Goal 1. To meet this objective:

- 4.4.3.2.b. describe in detail how the Vendor allows users to configure reports to adjust the parameters;

Cognos provides report writers an ability to add parameters to any reports. This functionality allows organizations to consolidate similar reports and reduce the overall reports maintenance in the long run. The end-users are able to select the desired values (limited based on their security role) for each parameter and execute the reports in real time.

The most common parameters we have seen across most reports at other SEAs are School Year, LEA and School in addition to the report specific parameters. If a particular LEA report user logs in, the Cognos security will restrict the user to the LEA value that the user belongs to. This prevents users from accessing data that they are not authorized to see.



Pennsylvania High School Feedback Report

Percent of High School Graduates That Enrolled in a National Postsecondary Institution Within One Year, by High School Attendance rate in Senior year

School Year: 2009 - 2010
IU:Allegheny IU 3

The graph below displays the breakdown of enrollees that enrolled in a higher education institution within one year of graduation (based on National Student Clearinghouse data) by the user selected student demographic attribute and High School senior year attendance rate for the school year. The denominator for each bar is the number of graduates for each combination of High School Attendance range and Student Demographic value. The percentages across may not be summed.

The table below displays the percentage of total graduates for the school year that enrolled in an institution of higher education within one year of graduation (based on National Student Clearinghouse data), by the user selected student demographic attribute and High School Senior Year Attendance range.

Select Student Demographic Attribute: Gender

HS Senior Year Attendance Rate	Student Gender	IU Enrollees	IU Graduates	Percent of Enrollees	State Average
60% or Below	Female	11	47	23.40%	26.25%
	Male	12	54	22.22%	20.97%
61-70%	Female	32	96	33.33%	28.42%
	Male	23	80	28.75%	23.49%
71-80%	Female	112	255	43.92%	38.37%
	Male	74	236	31.36%	28.05%
81-85%	Female	234	415	56.39%	49.78%
	Male	140	356	39.33%	35.93%
86-90%	Female	595	917	64.89%	61.62%
	Male	410	806	50.87%	45.22%
91-95%	Female	1,434	1,854	77.35%	72.63%
	Male	1,275	1,864	68.40%	60.08%
96-100%	Female	1,368	1,656	83.82%	74.85%
	Male	1,551	2,037	76.14%	66.35%
Not Available	Female	9	40	22.50%	45.44%
	Male	4	35	11.43%	29.23%
	Summary	7304	10748		

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Figure 4.4.3-6. Pennsylvania High School Feedback report showing data being filtered (top right) by School Year and IU (RESA).

4.4.3.2.c Describe in detail how the solution will allow for exportable files in multiple formats

RFP Reference: Section 4.4. Qualifications and Experience, page, 31

4.4.3.2 To provide reports that have drillability up, down, and through data, and export capabilities, based on role-level access, as specified in Goal 1. To meet this objective:

- 4.4.3.2.c. describe in detail how the proposed solution will allow for exportable files in multiple formats that pull from the DWRS while adhering to user access roles, privacy requirements, and suppression rules. Specify the formats in which the proposed solution will be able to export files, the development process used to make reports exportable, and the way in which end-users will access tools to export files.

Authorized users can export data they have access to within the SLDS using Cognos reports, queries and OLAP cubes. The data can be exported in PDF, Excel and comma-separated value formats. Users will only be able to access and extract appropriate data. In the requirements phase of the project, Deloitte will work with WVDE to define the necessary Cognos roles to control access to the SLDS reporting and analysis functionality and to the reports, queries and cubes themselves. In our experience, end-user roles are often developed to restrict access to student and staff-level data and to reports that include sensitive data such as student discipline or special education details. In addition, LEA users are limited to only being able to view data for their LEA.

We plan to develop the five P20 extracts out of the SLDS using Cognos by leveraging its exporting capabilities in various formats such as CSV, text files, etc. Data can also be extracted directly out of the WVDE Microsoft SQL Server database by database administrators in text and other formats. Once exported, the data can be integrated with other information available as necessary. Because our proposed solution is based on the Microsoft SQL Server database, the solution allows for access using standard sql and provides for ODBC and JDBC connectivity associated with MS SQL Server.

Identity and access management challenges as well as licensing fees are a big deterrent for SEAs to allow parents and the public direct access to the reporting system. We have found that an efficient way of providing public facing reports (compliant with privacy guidelines and with low N suppression) to parents and general public is to export the applicable report from Cognos into PDF format and publish it to a public Web site. In our experience, these public facing reports do not need to be dynamic in nature and are typically refreshed once a year or once per semester and do not require a lot of effort to keep them updated on a public Web site.

4.4.4 Goal IV: Professional Development Services

RFP Reference: Section 4.4. Qualifications and Experience, page, 31

4.4.4. As part of the WVDE's PK-12 SLDS initiative, the WVDE seeks to have effective professional development services provided by the successful vendor, which will be delivered through a variety of relevant, ongoing, and continuous models. This professional development is meant to help equip developers and end-users with the skills and knowledge needed to effectively manage and use the DWRS. End-users should be equipped to make data-driven decisions (e.g. policy development, administrative operations, instructional practice, and strategic planning) that impact the education of students through enhanced data access and effective reporting at multiple levels (e.g., grade, school, LEA, regional, state).

The implementation of the SLDS will require a period of change for the state and local users. Functional and technical users will learn new processes and develop new skills. With our significant experience helping users adopt to new technology, the Deloitte/eScholar team will provide users with training to determine they have necessary skills and knowledge to work in the new environment. The Deloitte/eScholar team has successfully planned and delivered an SLDS blended learning solution for the Commonwealth of Pennsylvania, and the State of Texas, among others. Education agencies in both states continue to use the information shared in training and apply it to the continuing betterment of their education system. The West Virginia Department of Education will benefit from the Deloitte/eScholar team's exceptional and unique experience.

The Deloitte/eScholar team believes developing and delivering comprehensive training and professional development is a key success factor in our system implementation projects. We take pride in the training materials that accompany the system and we focus on thoroughly training staff so they can use their system in the most effective and efficient manner possible.

Not only do users need to understand new system functionality, they need to be build the knowledge, skills and abilities required to successfully implement the business processes associated with West Virginia's new SLDS.

The benefits of providing a training program for the WVDE SLDS project includes the opportunity for users to learn how to use the new technology and reporting services. An effective training program also provides users with increased knowledge and skills to operate in the new technology environment The implementation not only changes the technology staff uses, but shifts the way the technical teams and end users perform their jobs and access and analyze information.

Training accomplishes more than teaching the basic skills needed to operate the system. A successful training program gives end-users **confidence** in the system and in their own ability to solve problems and work their way through the normal learning curve associated with any major change. With Deloitte/eScholar's experience, we understand that training

Deloitte's training success has been recognized through awards and recognition:

- Ranked top 10 in Training Magazine's Top 125 for the past six years
- 2010 named to Training Magazine's "Hall of Fame"
- Excellence in Learning Award: *Brandon Hall*
  - Now entering its 19th year, the Brandon Hall Group Excellence Awards Program is the most prestigious awards program in the industry. Often times called the "Academy Awards" by Learning, Talent and Business Executives.

extends far beyond what the person sees and does in the classroom.

Our training experience, combined with WVDE staff's programmatic knowledge, provides the right combination to build a high-quality SLDS training program. The Deloitte/eScholar team will work with WVDE to refine the training program, not only bringing about a successful implementation, but also to be a lasting resource to WVDE's technical teams, educators, policy makers and researchers.

The Deloitte/eScholar team offers a training approach that fully satisfies the requirements outlined in the RFP and supports learning by WVDE's staff and end users on how to use the new system and run and interpret educational reports leading to improved educational outcomes.

The Kennedy Assessment of HR Consulting:

- Rated Deloitte's Human Capital practice the highest rating
- Noted Deloitte's broad and deep capabilities in Learning and Development strategies and design

Training Methodology

Our training delivery approach is grounded in the Deloitte/eScholar team's SLDS Playbook. We understand the big picture and the intricacies of how each thread of work contributes to the success of the project and helps WVDE execute a training program that creates ownership and understanding of the system and empowers staff so they are comfortable with the new functionalities.

Our training methodology is designed to provide a broad training program tailored to each user's needs. This methodology focuses on providing WVDE's staff, educators, policy makers and researchers with the knowledge, skills, and abilities they need to achieve competency and high performance to meet business goals. We also focus on people and organizational issues associated with large training deployments; we are equipped to deal with issues that arise from previous experiences in states such as Pennsylvania and Texas.

Our use of the ADDIE (Analyze, Design, Develop, Implement, and Evaluate) training development methodology has been honed by many years of practical experience working with our clients. Our systematic, yet flexible methodology provides a menu of methods, tools, and techniques from which to choose to implement quality education and training programs.

Deloitte uses resources and draws upon expertise from our Human Capital Training practice to create the subject matter expertise required to develop, execute, and deliver blended learning programs with exceptional training content. The Deloitte/eScholar team has training professionals who bring extensive knowledge and experience in our learning approaches to the WVDE SLDS project. Services provided include training strategy, training content delivery and knowledge transfer strategy.

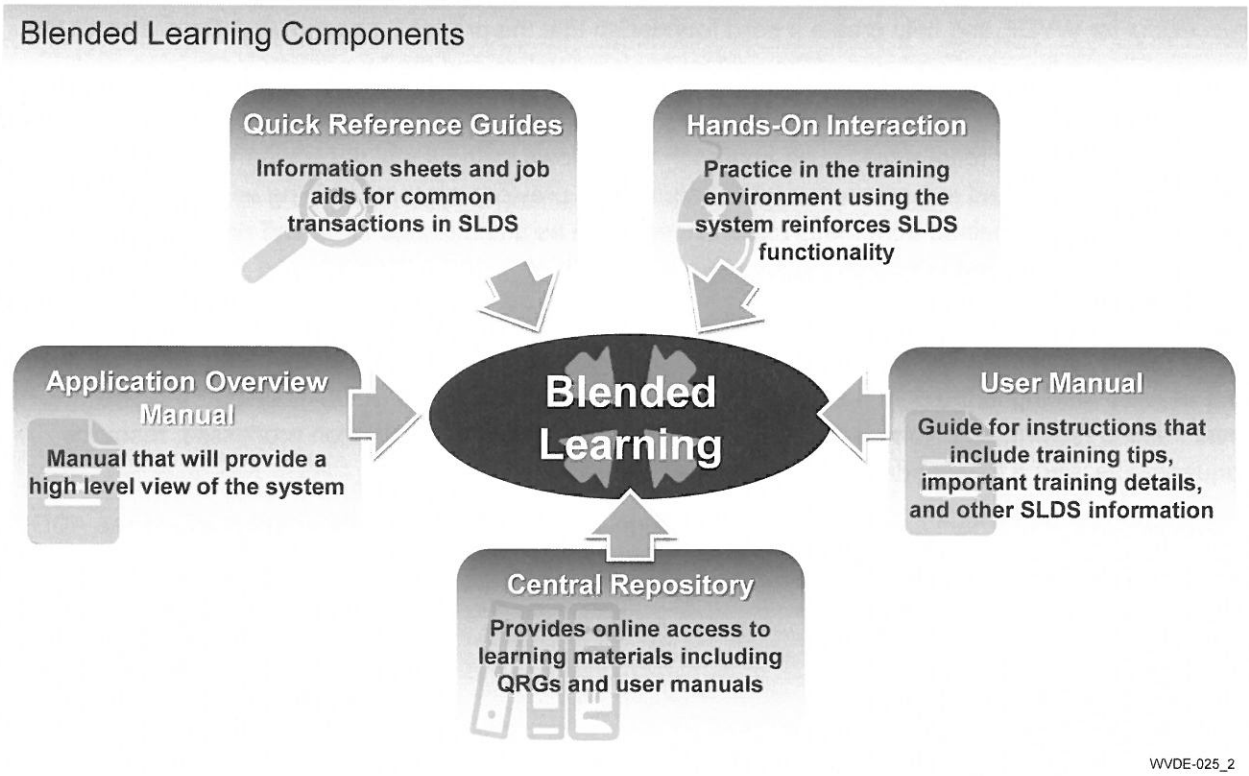


Figure 4.4.4-1 Blended Learning Approach to Training.

4.4.4.1 Training Plan

RFP Reference: Section 4.4. Qualifications and Experience, page, 31

4.4.4.1 To develop a training plan that demonstrates the capacity of the Vendor to deliver the training, demonstrate evidence of enhancing the capacity of training recipients, and to demonstrate differentiated training goals and methods for WVDE developers/programmers, Train-the-Trainer recipients who will disseminate information/provide training, and end-users.

The Deloitte/eScholar team has a history of providing training resulting in successful end user adoption of systems, especially SLDS systems. We have successfully trained users in four states to use these systems to improve data quality and student outcomes. We are confident that we can leverage our in-depth understanding of West Virginia's business needs to create effective training for your SLDS users.

Training Plan

Our training approach maps directly to the requirements outlined in the RFP. For each training task and deliverable, we work with WVDE to tailor the training plan to successfully develop training materials to serve the WVDE's immediate and long term needs.

Whether it is Train-the-Trainer or technical training for WDVE staff, we have a broad and effective SLDS Training Plan that builds quality into the training process every step of the way.

The primary activity prior to deploying training is preparing the SLDS Training Plan; a document that can stand on its own as the primary written source for SLDS training. Successful training plans detail the key phases of the training life cycle (ADDIE). They also take into account the key factors that will make training

successful for WVDE and help create a solid foundation that the project team can work from. The SLDS Training Plan is the heart and soul of the system implementation and the foundation for training and professional development activities.

The Deloitte/eScholar team employs an approach that follows instructional design standards and is based on the lessons learned and experience we have acquired on previous systems training engagements. The knowledge we have gained from these experiences serve as a knowledge base and provides WVDE the benefits derived from our collective experiences.

The SLDS Training Plan provides the overall approach, methodology, and processes required to support the SLDS training program. The SLDS Training Plan outlines how the Deloitte/eScholar team designs, develops, and delivers training to the right people at the right time. Additionally, the SLDS Training Plan provides high-level training recommendations, such as infrastructure requirements, evaluation processes, resource requirements, and a training deployment timeline.

To develop and implement an in-depth quality training solution, Deloitte/eScholar team utilizes the ADDIE instructional design model.

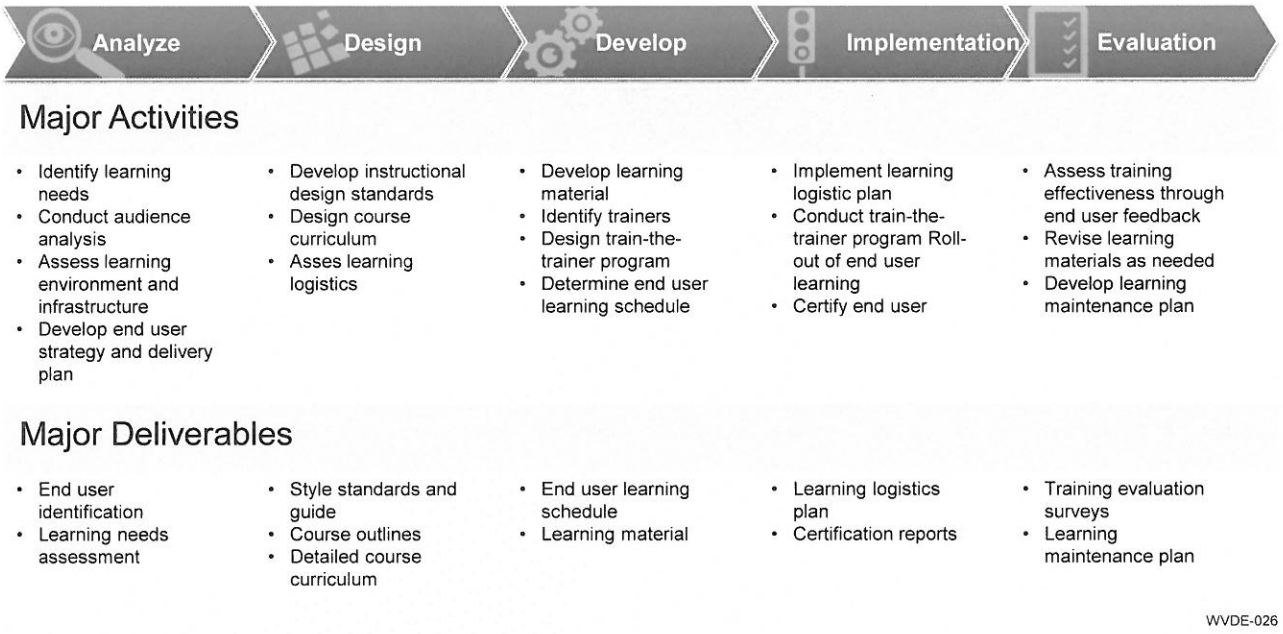


Figure 4.4.4-2. ADDIE Instructional Design Model.
Successful training plans detail the key phases of the training life cycle (ADDIE). They also take into account the key factors that make training successful for WVDE and help create a solid foundation that the project team can work from.

- **Analyze**

  A solid understanding of stakeholder training needs and certification priorities are determined allowing us to design a role based curriculum.

- **Design**

  Specific course topics are determined, outlined, and sequenced to produce a detailed training curriculum. Our approach to designing our training program is to optimize principles for both developing curricula and selecting delivery methods. Learning principles are based on our understanding that adults:

  - Learn better in an interactive environment
  - Learn better by doing
  - Learn better with the help of use cases, stories and analogies
  - Need to understand how their role fits into the bigger picture
  - Remember only the information that is relevant to their lives and work

It is also important to evaluate the audience and determine which training media to use both inside and outside of the classroom during the design stage.

- **Development**

  Develop blended learning materials to be ready for delivery.

  Training material formats may include Word, Excel, Power-Point, video, and computer-based simulations that recreate the actual job functions required in for a successful implementation.

  We place a strong emphasis on developing materials to train the new system's functionality and processes in the context of end user's daily work.

  We determine that that each role in the SLDS implementation is mapped to the correct job skills.

- **Implementation**

  Deliver technical SLDS and end user report training through a variety of methods:

  - Train-the-Trainer - train WVDE staff to conduct end user SLDS training on reporting capabilities
  - Technical instructor-led training (on-site classroom for developer/programmers)
  - Computer-based simulations, exercises, and knowledge assessments
  - Follow-up training Q&A webinars
  - Communication vehicles, such as, Town Halls, Quick Reference Guides, Fact Sheets

- **Evaluation**

  Deloitte/eScholar provides quality assurance throughout the entire training life cycle as a continuous process to verify that:

  - Training materials are appropriate for each learning group
  - Training is specific to the tasks that the trainee performs

- Our current training materials and any custom development based on the new requirements are at the appropriate level of detail
- Review of the training material is performed in a timely manner

End user training effectiveness is measured by assessing end user's knowledge and skills and conducting end user training surveys.

Training Schedule

A well-conceived and realistic training schedule is critical to the success of the training program for WVDE. The implementation of the new SLDS system imparts change on users across West Virginia. This change means staff may be apprehensive about adapting the new system especially if system implementations have not gone well in the past. A well designed and thought-out training schedule provides enough time for users to build the requisite knowledge of the system, but not too much time that they forget functionality or get rusty before their respective go-live date.

Our success delivering similar training programs in other states demonstrates that we have encountered these challenges before and have devised effective training schedules that create the right balance of enough time for training delivery.

The training schedule aligns with the implementation timeframes. The training schedule is submitted as part of the training plan and allows for just-in-time training for staff. This schedule is revised if changes are made to the project-wide plan or implementation schedule.

The Deloitte/eScholar team works together with WVDE in an effort to combine the knowledge of SLDS to create the training plan. This plan is structured such that the specific needs of the end user groups are identified and met. The Deloitte/eScholar team's successful SLDS development and large-scale implementation experience helps to confirm our training methodology and training plan construction are as efficient and effective as the systems they support.

The Deloitte/eScholar team is proposing a total of eight training sessions. The following table highlights our proposed training plan for the WVDE SLDS.

Course	Format	Audience	Sessions/Hours	Objective
Reporting and Analysis	Train-the-trainer	WVDE Trainers	Two sessions Six hours each	Enable WVDE trainers to train end users at the LEA and Regional level on the use of the report and cubes. This training includes learning the mechanics of how to access and run reports and cubes. The training also includes how to analyze and interpret the data.
Reporting and Analysis Administration	Instructor Led	Technical Support Staff	One session Six hours	Enable technical support to access and run reports and analytics.
System Administration	Instructor Led	Two - five WVDE Technical Staff	One session Four hours	Provide training on installation and administration of eScholar components
Data Quality Engine	Instructor Led	Two - five WVDE Staff	One session Two hours	Provide training on configuration of eScholar Data Quality Engine
Source System SME Training	Instructor Led	Ten - fifteen WVDE Staff	Four sessions Four hours each	Provide training on use of eScholar integration templates and data loading

Course	Format	Audience	Sessions/Hours	Objective
Data Extract Training	Instructor Led	Ten - fifteen WVDE Staff	Four sessions Four hours each	Provide training on development of extract files and testing
Installation and Configuration Training	Instructor Led	Ten-fifteen WVDE staff	One session Four hours	Provide training on system installation and upgrades
EDEN/EdFacts Training	Instructor Led	Ten-fifteen WVDE staff	One session Four hours	Provide training on the creation of EDEN/EdFacts files

Table 4.4.4-3. Deloitte/eScholar proposed training plan.

4.4.4.2 Training Sessions

RFP Reference: Section 4.4. Qualifications and Experience, page, 31

4.4.4.2 To conduct training sessions and create training modules, both initial and follow-up, with differentiated goals for WVDE developers/programmers using face-to-face trainings, supporting documentation, and resources to support this group; train-the trainer recipients who will disseminate information/provide training within WVDE, to school and district users, and to other public-facing users who wish to access the publicly available portions of the SLDS; and end-users that include both electronically mediated modules and print-ready resources.

Train-the-Trainer

A successful Train-the-Trainer (TTT) program for WVDE leads the way for a successful system implementation. We understand the importance of building a team of experts. The TTT is a critical piece of training delivery; it creates learning sustainability by developing internal resources to deliver training following the implementation launch.

The focus of each Train-the-Trainer session is for the trainers to learn how to use the SLDS, understand the reporting capabilities and practice using the training tools used to conduct end user training. During the Train-the-Trainer session, the Deloitte/eScholar instructors demonstrate each section of the end user course, providing training tips and insights along the way, while the "Trainer trainees" participate as students gaining hands on experience for system functionality and awareness of available training data. Executing this Train-the-Trainer approach helps to provide the following:

- Trainers are comfortable with the system and training materials
- Trainers have a consistent approach to presenting course material
- Trainers are familiar with new business practices
- Trainers are equipped with the knowledge and tools they need to coordinate and manage their training sessions
- Trainers are aware of the 'sticking' points they may face when delivering training and have had a chance to discuss and provide solutions for those items

Our experience has proven a successful Train-the-Trainer program enables the trainers to walk away from the sessions with the knowledge and understanding of how to coordinate and manage their sessions, how to escalate and resolve issues and how to handle the tough questions when they deliver training to end users. Each of these skills helps build their comfort with the system and the materials they are training, making each trainer a better trainer and more of an expert for West Virginia. Besides developing new skills, the

Deloitte/eScholar team provides WVDE TTT Trainees with a Trainer's Guide, learning tools, job aids, and the end user training materials in order to successfully conduct end user training sessions.

The TTT is a collaborative effort representing significant value-add to ongoing knowledge transfer, support, and self-sufficiency. Trainers who deliver end user training will play a vital role in helping stakeholders understand what processes, activities, and work steps are to be performed in the reengineered environment.

The following are key learning objectives for the SLDS Train-the-Trainer session:

- Design training materials to be shared and filtered down to the education community.
- Transfer the training material and Trainee's toolkit to WVDE Trainees to effectively and efficiently train end users.
- Train trainees on how to access and analyze SLDS reports and run custom reports by using cubes
- Train trainees how to interpret SLDS reports and use the data to improve student achievement and educational outcomes.

The tangible takeaway from the TTT program is the trainer's toolkit. Our successful Train-the-Trainer program experience has confirmed that certain materials are required to properly prepare trainers for end user training. These materials include checklists, quick reference materials for dealing with change, and training facilitation scenarios. Each component of the trainer's toolkit comes from lessons learned and leading practices contributing to the overall training experience, making the difference between a mediocre training and a very successful one that is 'polished' and well received.

4.4.4.3 On-site Training

RFP Reference: Section 4.4. Qualifications and Experience, page, 31

4.4.4.3 The contractor should be on-site at WVDE to (1) install and implement the DWRS in a test environment, with the intent of ultimately moving it to a live environment; (2) to train 2-5 technical support staff on installation and maintenance of all components of the DWRS; (3) to train 5-10 functional experts on use of the reporting tool to build, modify and run reports; (4) to train 2-5 technical support staff on use of the ETL tool to modify delivered mappings and create new ones.

Technical Training

Change is rarely easy, but we have the experience and tools within our team to help make that change easier and position WVDE for a successful implementation. We understand how to work with the ultimate users of the system so they are ready and willing to adopt a new system at go-live.

It is critical that this transition occurs as painlessly as possible and each user has the support and information needed to increase their comfort level with the new system. Each user is challenged to learn new functionality and a new way of thinking as they become proficient users of the new system.

Deloitte/eScholar's understanding of the factors influencing technology adoption projects helps us manage and support the training process. Armed with this understanding, we can assess where people are in the adoption process and support them as they move from technology acceptance through usage.

The Deloitte/eScholar team conducts an on-site instructor-led training session for WVDE developers and technical staff to support to the new SLDS technical environment and reporting solution.

The Deloitte/eScholar team works closely with WVDE technical staff developing training materials that are driven by the way in which WVDE and LEAs operate in the transformed business environment, incorporating scenarios, simulations, or To-Be process flows to prepare employees for the change.

The Deloitte/eScholar team is responsible for training material development and training delivery preparation for both technical instructor-led training and the TTT. The training activities include compiling materials for each Deloitte/eScholar led training session as well as posting training materials in a print-ready form to external sites for easy trainee access.

The technical training includes the training listed below.

- Train 2-5 technical support staff on installation and maintenance of the components of the DWRS. This training includes:
  - Data quality engine compound data quality checks
  - System administrator training
  - Source system SME training
  - Data extract training
  - Installation and configuration training
- Train 5-10 technical support staff on use of the reporting tool to run reports and analysis. This training includes:
  - System administrator training

- Navigating the reporting tool
- Report Generation
- Report analytics

In addition to the formal training, transferring knowledge from the Deloitte/eScholar team to WVDE learning audiences occurs through daily interaction while working on work products and other deliverables. Please see *Section 4.4.6* for a more detailed description of our Knowledge Transfer approach.

The Deloitte/eScholar Team maps each user to role-based training. Based on our experiences deploying statewide SLDS implementations, we have identified key roles that must be fulfilled by the WVDE staff. While each role is not necessarily an FTE equivalent, the responsibility should be owned by a named staff member. It will be our goal to determine that each end user receives the necessary training.

System Administration Training

The scope of this training begins with an overview of data warehousing and the WVDE data warehouse environment. Participants are trained in navigation and application of the eScholar Data Manager, including configuring collections, monitoring of the data flow process and interpreting error and warning files. System level training also provides participants with the ability to use the eScholar Utility Plans to prepare the data warehouse for years of data collection. Participants also understand how to leverage the administrative tools in eDM including notification manager and system properties to properly manage the end user data submissions. The IT staff likewise receives an overview of the WVDE data warehouse project, including key project contacts, project milestones, communication processes and standard operating procedures. Examples of proposed training materials are included below. Actual training materials provided are tailored to specific audience groups. The list below is illustrative only.

Proposed Training Materials:

- Guided Exercises
- Simulated User Activity
- Narrated Tutorial
- Course Assessment

Data Quality Engine and Compound Data Quality Checks

This will be a facilitated working session for the WVDE team members responsible for defining and implementing the Data Quality Engine rules. The Deloitte/eScholar team will review the logic behind the rules with participants and assist in developing new Compound Data Quality Checks, This session also provides instruction on analyzing and resolving the compound data quality error messages that may be generated during the data submission process.

Proposed Training Materials:

- Data Quality Engine Administrator Guide
- Compound Data Quality Check simulation

Source System SME Training

The Source System SMEs will be provided with comprehensive training on the eScholar Data Integration Templates and coached to map data elements in the respective source systems to the eScholar Data Integration Template format to develop files ready for loading into the eScholar Complete Data Warehouse. The Source System SMEs will be able to load files through eScholar Data Manager, leverage the instances of automated data flows and troubleshoot error and warning files. These team members will also receive an overview of the WVDE data warehouse project, including key project contacts, project milestones, communication processes and standard operating procedures. Examples of proposed training materials are included below. Actual training materials provided are tailored to specific audience groups. The list below is illustrative only.

Proposed Training Materials:

- User Guides
- Guided Exercises
- Simulated User Activities
- Narrated Tutorials
- FERPA PowerPoint Deck
- FERPA Assessment

Data Extract Training

The Data Extract Developer will be trained to run extract routines and set up instances of automated data flows through eScholar Data Manager. The data extract developer will also understand how to interpret and troubleshoot error and warning files generated by the data loading process. Examples of proposed training materials are included below. Actual training materials provided are tailored to specific audience groups. The list below is illustrative only.

Proposed Training Materials:

- User Guides
- Guided Exercises
- Simulated User Activities
- Assessment

Report Administration Training

WVDE technical staff will be able to administer the Cognos reports. The training will include an overview of the Cognos Framework Manager and information on how to administer the Cognos environment and execute the Cognos reports and analytics. The use of Cognos Connection and Cognos security components will be covered. .

Proposed Training Materials:

- Cognos Documentation

- Guided Exercises
- Assessment

EDEN Training

Training specific to the files and formatting of EDEN data for source system SMEs and EDEN administrators.

Proposed Training Materials:

- EDEN Files and Formatting PP Deck
- EDEN Product Documentation
- EDEN Files Guided Exercises

Installation and System Configuration Training

Participants are coached on industry practices for installing and maintaining the eScholar suite of products. Participants work with eScholar SMEs to configure a secure and streamlined environment.

Proposed Training Materials:

- Installation and system documentation for eDM and CDW
- Installation and System Configuration Guided Practice

4.4.5 Goal V: Project Management

RFP Reference: Section 4.4. Qualifications and Experience, page, 31-32

4.4.5. As part of the WVDE's PK-12 SLDS initiative, the fifth goal of the project is to have a comprehensive and responsive management plan that supports the development and execution of the DWRS and all associated goals stated in this RFP. The WVDE believes that strong project management is paramount to an initiative 's success and it should include an efficient and complete communication strategy to support WVDE with the goals and objectives within this RFP.

In addition, holistic project management should allow the state to understand the scope and sequence of the project through access to clearly articulated project schedules, staffing a locations , proposed timelines and deliverables, success metrics, phasing, issue and risk management, tracking , and resolution.

This section describes our proven project management approach. Our Project Management methodology and approach is based on the Project Management Institute Body of Knowledge (PMBOK) and reflects the lessons learned from our 4 SLDS implementations. Our Project Management approach helps identify issues and risks before they become significant problems. Other key aspects of our approach include collaboration, comprehensive communication, complete accountability and effective scope and change management.

- Our PM Methodology is based on PMBOK
- Multiple successful SEA project implementations
- Collaborative PM approach

4.4.5.1 Description of PM Plan and Tools

RFP Reference: Section 4.4. Qualifications and Experience, page, 32

4.4.5.1 To develop a comprehensive project management plan to drive project success in Goals 1 through 5. As part of this project management plan, the vendor should provide a complete description of proposed project management tools, which include samples from previously completed projects, processes, and deliverables that will be used to manage the work of the Vendor and all interactions with the WVDE. It should be clear from the description that the Vendor has the capacity to implement and manage a project of the size and scope of the WV SLDS Initiative.

Deloitte is proposing a nine month project plan that assumes a start date of January 2014. The figure below shows the proposed high-level tasks and schedule within our approach. This project plan is a flexible approach that can be modified based on formal discussions with WVDE during the Project Initiation phase.

Alan Hartwig, Project Manager

Alan has served as the Project Manager on four successful SLDS implementations utilizing the eScholar Complete Data Warehouse and has over 15 years of public sector data warehouse and business intelligence experience.

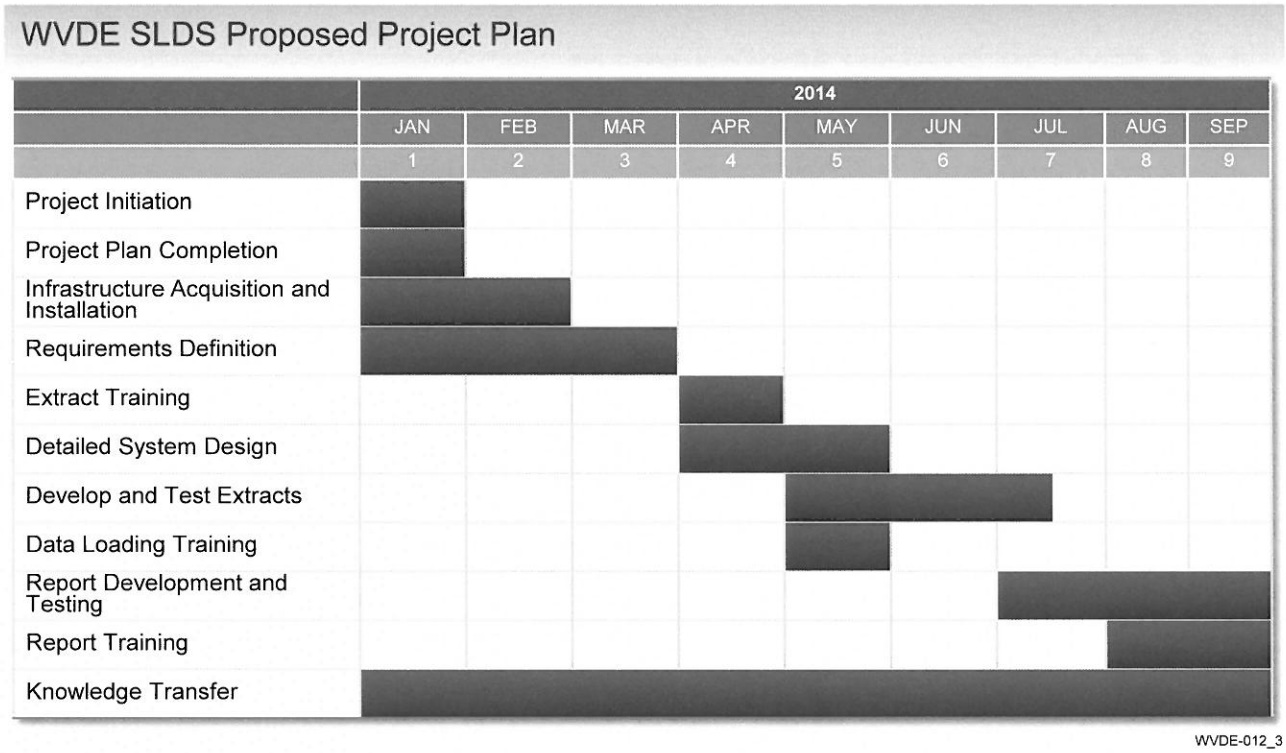


Figure 4.4.5-1. Proposed Project Plan.

Project Initiation

The project initiation task includes the project kick-off meeting, establishing the project team and project governance processes. The project repository will be established during this phase of the project.

Project Plan Completion

The project plan completion task includes the completion of the Project Plan in Microsoft Project and the review and acceptance of the plan by Deloitte and WVDE. The Project Plan will identify both Deloitte and WVDE responsibilities. The project plan will include plans for project communications, risk management, issue management and change control.

Infrastructure Acquisition and Installation

WVDE is responsible for acquiring and installing the hardware and operating system software. This task includes the acquisition, installation and configuration of the hardware, operating system software and database management system.

Requirements Definition

Deloitte will work with WVDE to finalize the requirements. This will include identifying the requirements for the reports, cubes and extracts to be developed by Deloitte and defining the data to be collected in the SLDS. The source system for each data element will be identified during this task.

Detailed Design

Deloitte will work with WVDE to design the reports and to finalize the extract template specifications during this phase of the project. Any required enhancements to the eScholar product will be finalized during this task.

Develop and Test Extracts

WVDE is responsible for developing data extracts using the eScholar extract templates as finalized in the Detailed Design phase. Deloitte will work with WVDE to test the extracts and provide feedback on any required modifications. The project schedule is very dependent on the extracts being developed on schedule. Deloitte will provide WVDE with the order in which the extracts should be developed.

Report Development and Testing

Deloitte will develop and test the 35 Cognos reports defined during the Detailed Design. This will include any required enhancements to the Cognos Framework.

Training

Deloitte will provide hands-on training to WVDE. The training will include classroom training and Train-the-Trainer format training depending on the subject. This training is described in more detail later in this section.

Production

Deloitte will produce and deliver a production-ready system that will be deployed in the WVDE test environment. Deloitte will complete the Knowledge Transfer activities.

Project Management Tools

Our team will use several project management tools to support the project including Microsoft Project, Microsoft Excel and Microsoft Word. We will use these tools, along with proven project management methodologies, to effectively monitor and control project activities.

Project Status Meetings

One of the most important activities the Deloitte/eScholar team will undertake is the communication with and coordination of project team members, including WVDE and eScholar. There are several ways to promote this sort of coordination and communication. The first is through a series of regularly scheduled project status meetings. Scheduled at regular intervals, these meetings will provide a time for everyone involved with the implementation of the system to discuss upcoming issues and finalize upcoming plans of action. These meetings will be in addition to any other meetings conducted for a specific purpose. Senior Deloitte team members will participate in these meetings to provide professional opinions regarding the progress of the project as well any upcoming issues that may be facing the team.

Project Status Report

A key to successful project management in a complex changing environment is the presence of timely, accurate, and understandable project status reports. Our approach to project status reporting will be to incorporate information from every activity and team member so that detail and summary information will be available to WVDE management concerning the following:

- Description of the tasks completed
- Next tasks to be completed
- Outstanding issues
- Key decisions

Issue Tracking and Resolution Process

Effective control of a complex project demands a project team that is skilled in the resolution of deviations from the original project work plan. Issues range from contract compliance to requirements/design approaches to potential change orders. Our approach to problem identification and resolution involves identifying causes of the problem, identifying possible solutions, evaluating the solutions, choosing the needed solution, and taking corrective action.

The process is comprised of the steps listed below:

- Identification
- Logging the issue
- Review and assignment
- Develop resolution
- Log the resolution

Interfaces with WVDE

Deloitte Consulting plans to use formal and informal communications at organizational levels to foster teamwork and obtain success. We recognize that WVDE staff involvement is a key ingredient in the system's long-term success. Therefore, it is critical that the staff fully understand aspects of the system. The most effective way to achieve this is to include the staff in the aspects of the project.

Our approach to interfacing with WVDE staff on the design, development and implementation of the SLDS focuses on the following:

- Client participation
- Routine project communication

Electronic Project Library

Our eRoom collaboration tool allows us to manage critical project management processes such as issue and risk via the Internet, allowing the project team to have real-time access to critical project information. The eRoom is accessed through a standard web browser. We will work with WVDE to create the appropriate

project structure within the eRoom and to establish the necessary access and security controls. The eRoom provides robust security and data access functionality and can be accessed by WVDE, Deloitte, and eScholar project team members.

Quality Assurance

Deloitte will work with WVDE to develop the acceptance criteria for each deliverable. The criteria will be based on the mutually agreed upon deliverable outlines. At the beginning of each phase, Deloitte will provide WVDE with outlines for deliverables for that phase.

The deliverable outlines will establish the purpose of the deliverable and describe the content.

We will agree on standards and formatting issues at the time of approval of the deliverable outlines. Our deliverables are usually produced using either Microsoft Word or Microsoft PowerPoint.

The project plan will be developed and maintained in Microsoft Project.

Risk Management

Our approach to the SLDS implementation for WVDE is based on our team's collective experience from similar implementations. Our approach is built on a foundation of risk management including communications and change management, robust testing, training, and knowledge transfer. Our confidence in our team's ability to achieve the milestones described in this proposal is based on our track record of multiple successful SLDS implementations in other state education agencies. These implementations were delivered on or ahead of schedule and on budget.

We understand the importance of anticipating potential issues that can affect the project work plan, schedule, and staffing. Our Project Risk Management approach provides a proactive process to identify issues in a timely fashion. We will work with the WVDE on early issue detection and resolution.

Deloitte recognizes that not all risk items can be anticipated. As a result, we will develop and implement a Risk Management Plan for the project. Our approach is described below.

Risk Identification Method

The focus of this method is on risks that are known, whether or not they have yet been communicated to project management, and on unknown risks. Risk identification must cover key development and support areas of the project. Our risk analysis method begins with a risk identification step, which was developed based on our previous project experiences and with the unique characteristics of a project in mind.

Risk Analysis Method

The second step of the risk management process is to analyze the information that is gathered during the risk identification step. Analysis provides the information necessary for risk planning. The key to risk analysis is the application of a quantifiable measure to the relatively unstructured data that is gathered during the risk identification step. At a minimum, a risk likelihood measurement and a risk impact measurement are determined so that each risk can be plotted.

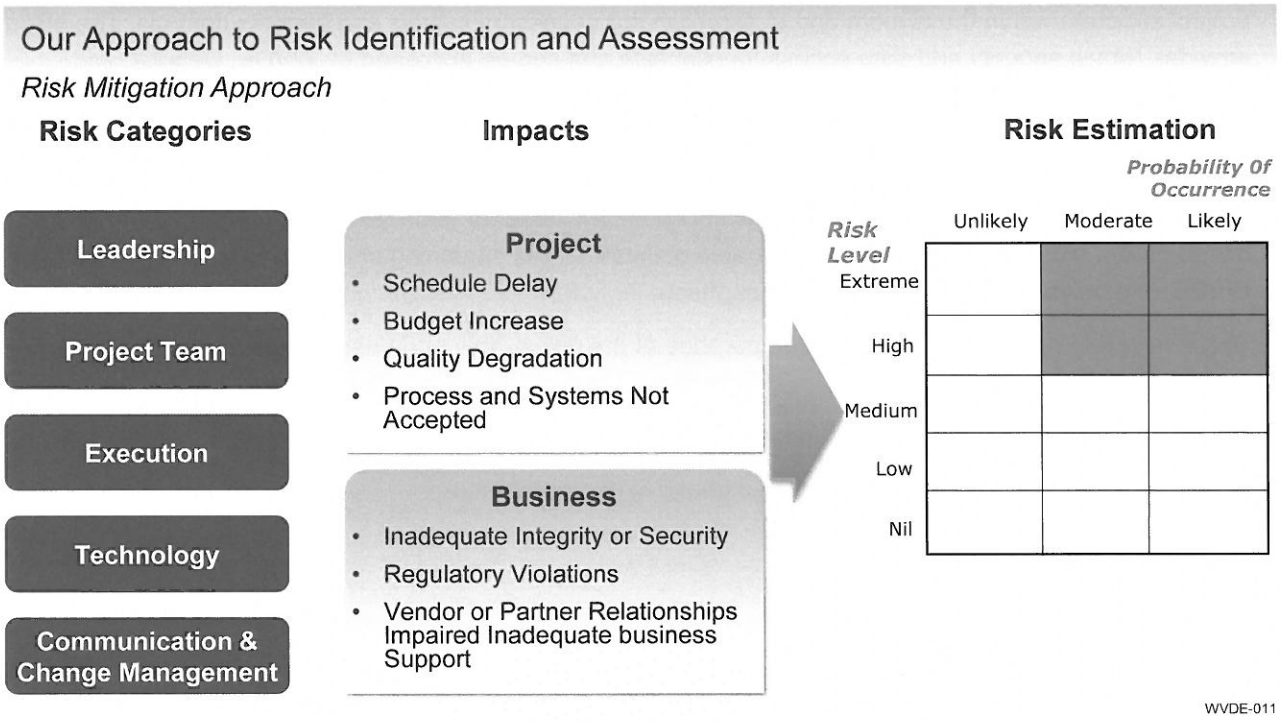


Figure 4.4.5-2. Deloitte's Approach to Risk Analysis.

Risk Planning Method

The project management team will take the results of the Risk Analysis phase and develop a Risk Management Plan. The amount of planning will vary depending on the nature of the risk. For example, a risk that has low likelihood of occurrence and a low impact will not have a corresponding risk plan whereas a high likelihood, high impact risk will have a plan established. Possible risk actions include: mitigate the risk, avoid the risk, accept the risk, and study the risk. A description with action items is also useful.

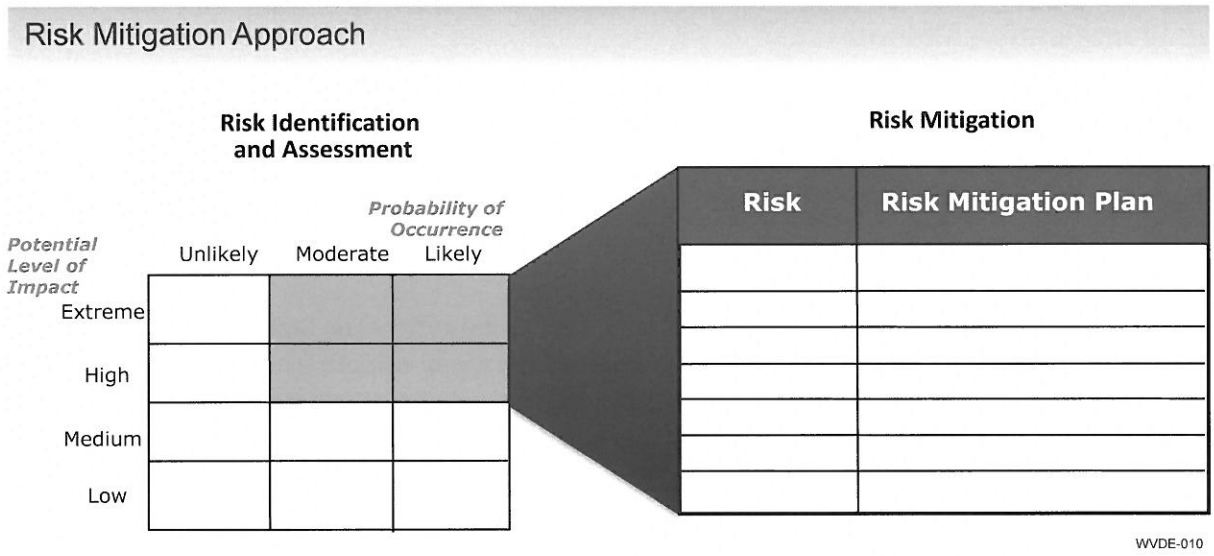


Figure 4.4.5-3. Deloitte's Risk Mitigation Approach.

Risk Tracking and Control

Once the risk plan is established it is important that the plan is monitored in an ongoing manner. The risk actions must be continually monitored in order to verify that the proper level of control is being applied. The risk plan will be coordinated with the overall project work plan to create greater awareness of the potential impact on the scheduled activities and deliverables.

Risk Communication

This is central to the success of the risk management effort. The project team will determine the methods used to communicate the outcomes of the risk management process. This communication is vital feedback to participants in the identification process. Stakeholders must have their concerns validated and be apprised of proposed actions to be taken and completed.

In the following table we provide some examples of common risk areas on our large-scale Education and data warehouse implementation projects and tools we use to mitigate them. We believe that our team's collective experience in these types of projects will enable us to anticipate and mitigate risk in an effective manner.

Risk Areas and Suggested Mitigation	
Potential Risk Area	**Risk Mitigation**
Data Quality and Availability • Data quality issues • Adequate data is not available for testing	**Tools to Mitigate Risk:** • Use highly configurable validations in the eScholar CDW. • We will work with WVDE during the requirements phase to identify data required for testing.
Vision, Sponsorship, and Leadership • Unclear purpose for overall project mission or specific team goals • Lack of public commitment from senior executives, where project successes and issues are not fed back to the team	**Tools to Mitigate Risk:** • Document, present, and publicize project mission, objectives, and value • Help confirm that senior executives are visible during major project activities, where executives provide status of project progress against business goals
Development • Source systems struggle to produce extracts • Errors in source system extracts	**Tools to Mitigate Risk:** • Provide training to source system staff on extract formats • The most frequent errors that we have encountered during past SLDS implementations are errors in the development of the source system extracts. We will put together a process for testing source system extracts as soon as they are available and providing feedback on any necessary corrections.

Figure 4.4.5-4. Risks and Mitigation.

4.4.5.2 Communication Strategies

4.4.5.2.a, 4.4.5.2.b Detailed plans

RFP Reference: Section 4.4. Qualifications and Experience, page, 32

4.4.5.2 To engage in effective communication strategies that bring the communication plan to fruition. The specifications for this objective include:

- 4.4.5.2.a Detailed plans around creating engaging, effective electronic communications and camera-ready electronic and print-optimized content for posting

The Deloitte/eScholar team brings extensive experience in successfully developing and executing communication strategies for SLDS implementations. Our comprehensive approach to communications helps stakeholders move from general awareness to championing, thereby accelerating the end user adoption process.

This section describes our approach to creating a solid communications plan for the WVDE SLDS implementation. The communications plan helps the Deloitte/eScholar team and WVDE properly manage communications; making sure accurate information is conveyed at the right time to the right people in a manner they are receptive to and with the appropriate level of detail. This establishes acceptance and generates support for the successful implementation the WVDE SLDS.

DISTINGUISHING FACTORS

Deloitte is a recipient of the Gold SABRE Award for Employee Communications, Ethics & Compliance Program.

- Deloitte's ethics and compliance communications campaign was selected for its creativity, messaging, and results achieved

Communications Approach

An effective communications approach is a critical component of the larger change initiative for the WVDE SLDS. Effective communications planning and delivery to each of the stakeholder groups is critical. Communications with impacted stakeholders in a timely and appropriate manner helps to manage their resistance, clarify details, and support them through the planned changes. This includes communication to senior levels within WVDE and impacted staff.

To foster a greater awareness, understanding, and support for the adoption of the SLDS, our communications approach includes five major steps:

Figure 4.4.5-5. Communications Approach.

- **Perform Communications Assessment:** Gain clear insight on the identities of key stakeholders and the level of impact the broad capabilities of the SLDS have on their jobs. This step informs the Deloitte/eScholar approach and core objectives that align with WVDE's vision to improve data-driven decision making. By assessing current communication preferences, this stage identifies opportunities to optimize content and delivery methods.
- **Develop Communications Strategy and Plan:** Create and implement a comprehensive communications plan that builds upon the Communications Assessment to support the longer-term goals of the SLDS. This phase defines communication objectives, establishes guiding principles and critical success factors, and develops a review process and feedback mechanisms to gather and respond to continuous stakeholder feedback.
- **Design Initial Communications Plan:** Define initial communications activities and timeline and provide recommended communication vehicles for each identified key stakeholder. This step raises awareness of the purpose and goals of the WVDE SLDS project and provides clear and concise information on its impact on the key stakeholders.
- **Support Communications Activities:** Provide WVDE with guidance on how to implement communications activities identified in the Communications Plan.

Communications Assessment

In collaboration with WVDE, the Deloitte/eScholar team will conduct a communications assessment. During this assessment, stakeholders are defined as individuals who are impacted by or can influence change, and who have a vested interest in the outcomes. Prior to developing the Communications Plan, it is critical to conduct a communications assessment to identify and define WVDE stakeholders, the level of impact the SLDS has on these individuals, messaging needs, current and desired commitment levels, and samples of communications tools used to reach them. As a result, Deloitte/eScholar has a clearer understanding of the individuals who benefit from the data and tools available from the SLDS. This analysis then guides the development of specific messages that resonate with each stakeholder group.

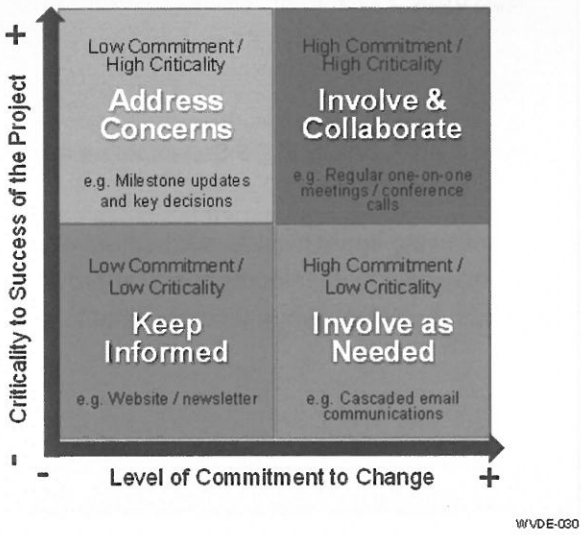


Figure 4.4.5-6. WV SLDS Stakeholder Matrix.

Identifying and analyzing key stakeholder groups guides the creation of targeted messages, making communications more efficient and effective. Figure 4.4.4-6 is a stakeholder matrix that maps WVDE stakeholders to one of four quadrants by assessing their level of commitment to change and their criticality to success of the project.

Communications Strategy and Plan

After completing the Communication Assessment, the Deloitte/eScholar team uses the results to develop the Communication Strategy and Plan. This plan identifies the guiding principles, communication objectives, key messages and stakeholders, timelines, media channels, review and approval processes, and feedback mechanisms that align with the overarching vision of the WVDE as it relates to the SLDS implementation. This strategy effectively prepares and engages key stakeholders. The following table identifies example WVDE stakeholder groups and potential communications activities including a variety of tools and electronic and print vehicles.

Stakeholder	Potential Communications Activities
WVDE Leadership	• Clearly articulated talking points to promote consistent messaging and key benefits • Leadership team regular updates and presentations
Policy Makers	• Preparation through Monthly calls and regularly scheduled readiness touch points • Policy Maker Toolkit tools, templates, and tips • Online knowledge library of PDF fact sheets, one-pagers, quick reference guides, etc.
Educators	• Targeted e-mails and wall posters • SLDS Specific Electronic Newsletter • Educator Toolkit tools, templates, FAQs, and tips • Online knowledge library of PDF fact sheets, one-pagers, quick reference guides, etc.
Researchers	• Researcher Toolkit tools, templates, FAQs, and tips • SLDS • Online knowledge library of PDF fact sheets, one-pagers, quick reference guides, etc.

Figure 4.4.5-7. WVDE SLDS Stakeholders and Recommended Communications Activities.

The following figure depicts our high-level communications development and approval process. The communications development and approval process ensures that there is a communications development process is in place when it comes time to execute the details of the Communication Plan.

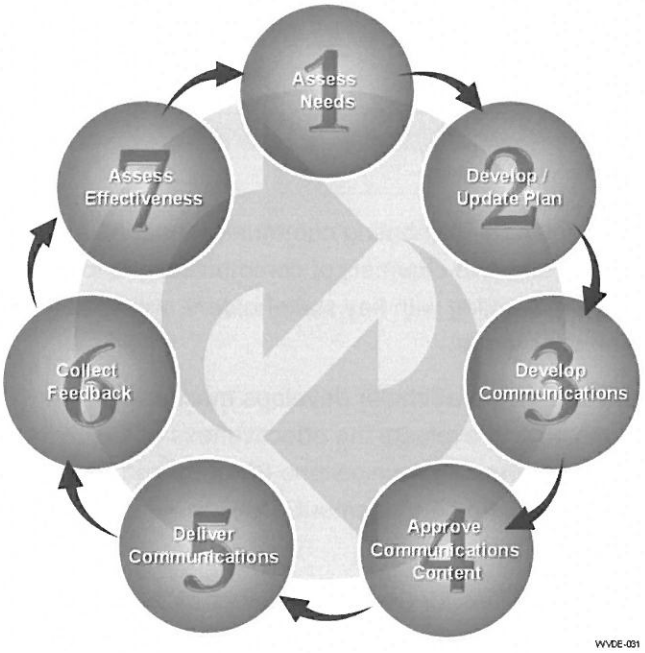


Figure 4.4.5-8. Communications Development and Approval Process.

Deloitte/eScholar tracks, collects, and incorporates feedback measuring the success of the communications developed. In collaboration with WVDE leadership, specific feedback and success metrics are used to analyze how and to what degree of success users understand and use the SLDS. Both formal and informal evaluation methods, including interviews, and surveys are conducted with WVDE. As a result, the communication tools, channels, and delivery methods can be adapted based on this feedback.

The following table lists examples of informal and formal evaluation tools:

Informal Tools
• Leadership interviews and informal feedback
• FAQ user activity
Formal Tools
• Short surveys aligning with specific SLDS release timelines

Figure 4.4.5-9. Informal and Formal Evaluation Tools.

4.4.5.2.b Description of how the vendor prepares and disseminates communications

RFP Reference: Section 4.4. Qualifications and Experience, page, 32

- 4.4.5.2.b Description of how the vendor prepares and disseminates communications.

Effective communications planning requires effective channels for distributing communications. As a guiding principle, Deloitte/eScholar focus on using established and effective channels of communications to deliver messages to key stakeholders. The Deloitte/eScholar team, working with key stakeholders, will identify the appropriate communication channel for each key stakeholder group.

Once communications are distributed to key stakeholders, Deloitte/eScholar develops mechanisms for enabling key stakeholders to provide input, ask questions, and to evaluate the effectiveness of the communications. Communication materials identified through the Communications Strategy and Plan are used to prepare stakeholders for change. On a recent SLDS related engagement, Deloitte led the Communication Strategy and over 4 months achieved the following:

- Determined the appropriate communication themes and activities for each stakeholder category
- Described the recommended activities to facilitate change adoption and readiness for Data Pipeline
- Identified the communication guidelines including feedback mechanisms to support message development and delivery
- Provided a communications plan to support overall technology adoption
- Designed communications to be filtered down to various stakeholders
- Managed stakeholder expectations
- Prepared stakeholders for change and gained stakeholder support

To achieve similar results for WVDE, the Deloitte/eScholar team will identify specific mechanisms for formal and continuous feedback.

As part of the Communications Strategy and Plan, the Deloitte/eScholar team follows the guiding principles identified below in Figure 4.4.5-10 that we believe should be used for SLDS communication activities.

Ensure Consistency	Maintain consistency and clarity of key messages (position statements and benefits) and branding (look and feel)
Address Target Audience Needs	Recognize differences in the information needs of target audiences (based on audience background and current level on commitment curve) in order to select the most appropriate communication key messages and communication vehicles
Repeat Messages	Repeat key messages using multiple models of communication to ensure messages are delivered and understood
Share Ownership	Promote ownership of the communication plan for all relevant program areas
Leverage Existing Vehicles and Explore New Communication Vehicles	Optimize the use of existing communication vehicles for efficiency (there are likely many easy quick wins) and explore new channels that fit well with audience and messaging
Keep it Straightforward and Simple	Message should be concise and to the point
Approve Messaging	All messages must be vetted and approved by WVDE leadership
Solicit Feedback	Where possible, utilize two-way communications mechanisms to monitor and increase the effectiveness of communication (and other change management efforts)

WVDE-032

Figure 4.4.5-10. Communication Guiding Principles.

One of the key analyses conducted during the development of the Communications Strategy and Plan is the development of the commitment curve (a sample is presented in the figure below). The communication activities are designed to help WVDE move people from awareness to adoption/championing. The commitment curve mapping analysis helps to uncover where specific stakeholder groups are along the commitment curve so communication activities are properly selected and planned.

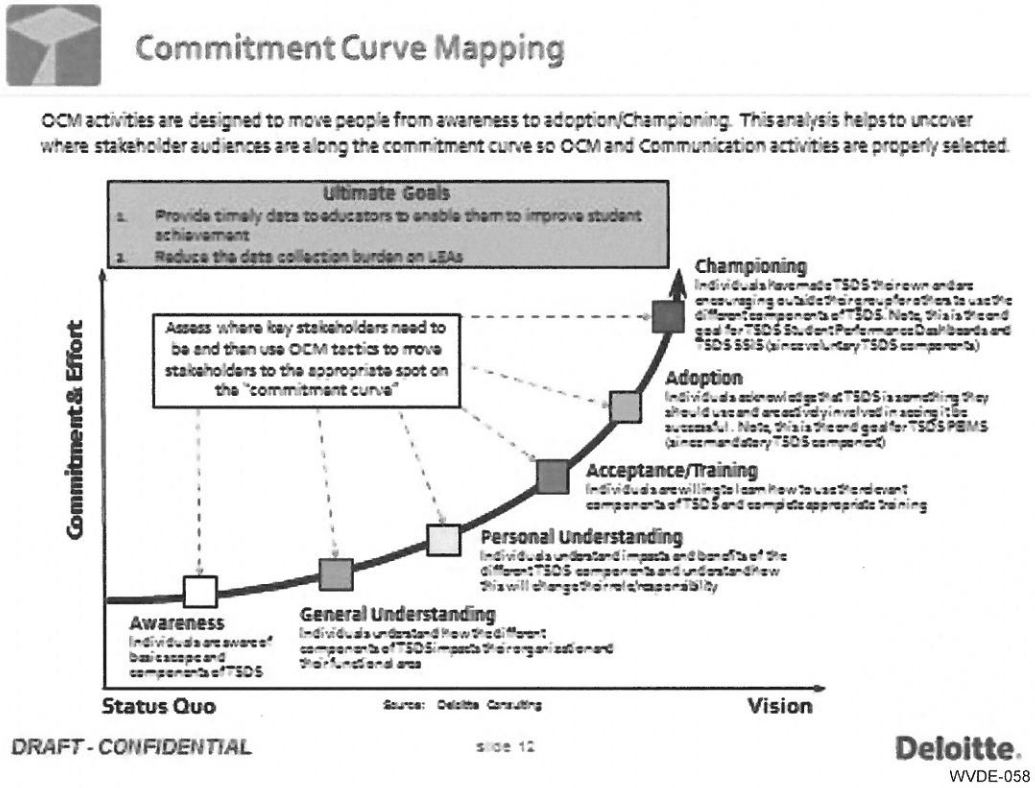
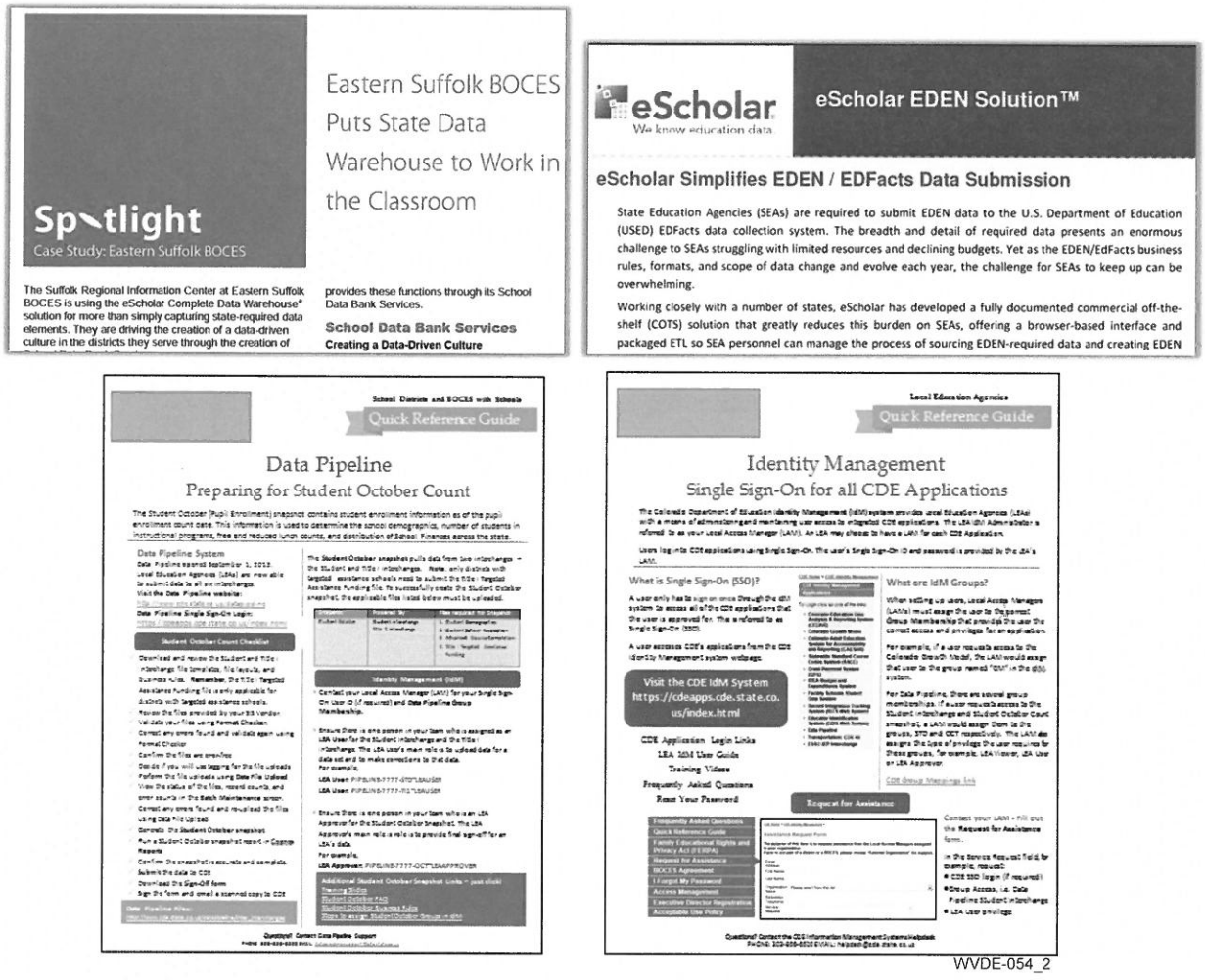


Figure 4.4.5-11. Commitment Curve Mapping from Sample Communication Strategy.

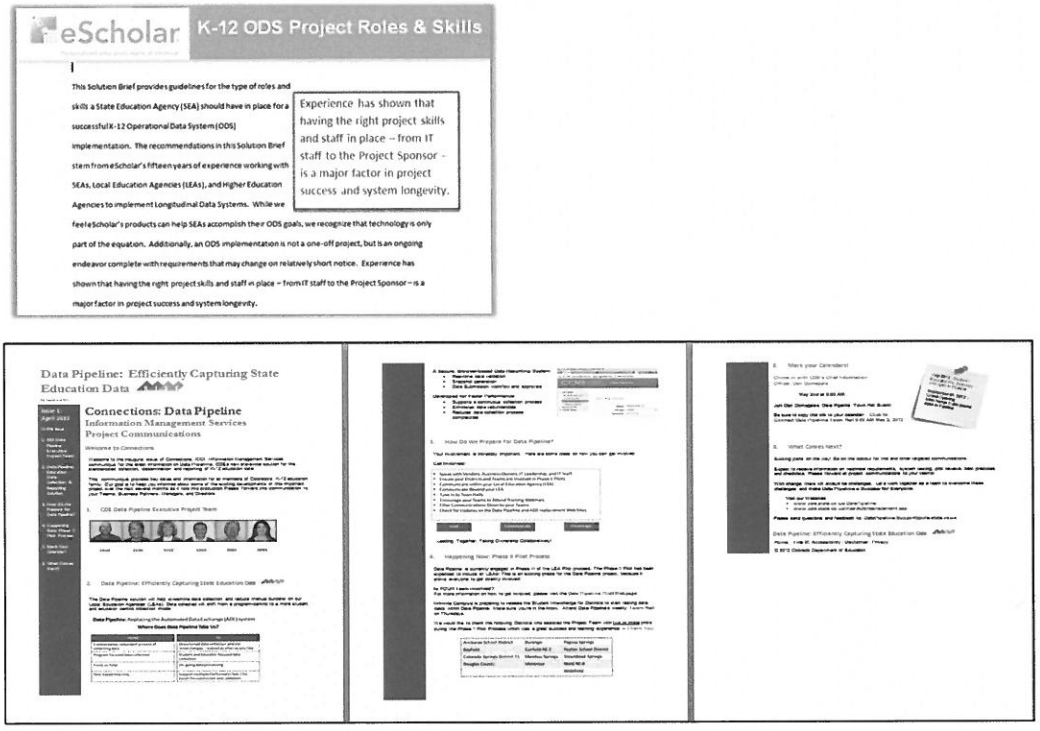
Implement Communications Activities

The Communication Strategy and Plan provides specific guidance relating to the creation of the communications materials. After identifying key messages for stakeholders through the Communications Assessment and developing the style guide and templates, Deloitte/eScholar supports WVDE in the development of multiple communications materials targeted at specific stakeholder groups. Figures 4.4.4-12 through 4.4.4-14 are examples of the type of communication materials that could be created for the WVDE SLDS project. The figures below are examples of a project fact sheet, newsletter, and a system fact sheet from other SLDS implementations.



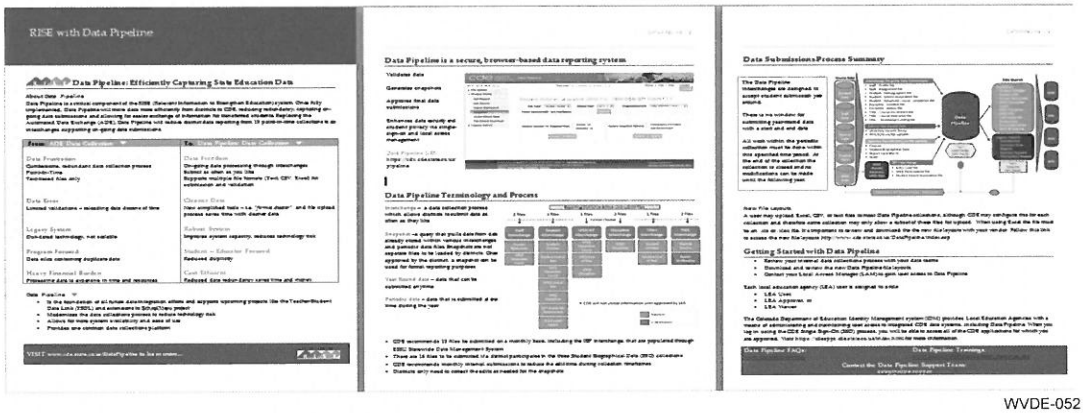
WVDE-054_2

Figure 4.4.5-12. Sample Communication Fact Sheets.



WVDE-053

Figure 4.4.5-13.Sample Communication Newsletters.



WVDE-052

Figure 4.4.5-14. Sample Communication System Fact Sheets.

Leadership and Supervisors

Deloitte/eScholar develops a variety of tools and other resources for WVDE leaders and individuals in supervisory roles to facilitate an understanding of the new system's impact on their staff and how to support their staff in their day-to-day use of the SLDS. These communication tools also help gain buy-in, understanding, and commitment needed from leadership and supervisors for a large-scale, transformational effort like the SLDS implementation to be successful.

4.4.6 Goal VI: Transition Strategy

RFP Reference: Section 4.4. Qualifications and Experience, page, 32-33

4.4.6. As part of the WVDE's PK-12 SLDS initiative , the state seeks to be in a contract with a Vendor that will directly and fully participate in the transfer of the program to the state at the conclusion of the project (either through the successful completion of the contract period or through termination). Successful transition should include, but not be limited to, a transition plan, meetings, identification of a core transition team, associated team members, documentation, and any resources to promote successful sustainability of the DWRS. As stated in Section 4.5 , Mandatory Requirements, all materials and products regardless of the forms developed for and used in conjunction with this project shall remain the property of WVDE regardless of the phase of transition. All deliverables become property of the WVDE in an electronic, editable form (e .g, stamped CD with all documentation, videos, manuals, business rules, etc.). The solution is not proprietary.

The Deloitte/eScholar team understands that the transition of the SLDS from the vendor team to the agency team is a critical step and will help to determine the long term success of the SLDS. Deloitte believes that effective knowledge transfer is achieved through a strong knowledge transfer plan, executing the plan, and analyzing the results accordingly. We know that strong transition sharing principles coupled with deep-seated knowledge of the nuances of the business (its processes, people and systems) are necessary for the "transition to" resources to continue with the tasks associated with the operations, management, and enhancement of WVDE SLDS.

4.4.6.1 Transfer Plan

4.4.6.1.1 - 4.4.6.1.2 Detailed information regarding the duration of the proposed transition plan and Transition Schedule

RFP Reference: Section 4.4. Qualifications and Experience, page, 32

4.4.6.1 To transfer the program and all associated deliverables to the WVDE by project conclusion. The responses to this objective should provide

- 4.4.6.1.1 Detailed information regarding the duration of the proposed transition plan, including transition meetings, core transition team members, FTEs required for transition team, administrative rights and access to all project deliverables;
- 4.4.6.1.2 A detailed schedule for the transition that presents a sequential, step-by-step description of the tasks or events and a timeline for the transition of materials and procedures; and

Our approach to WVDE SLDS knowledge transfer focuses on techniques to transfer necessary skills and responsibility of the system components to reduce WVDE's reliance on contractor support. It involves both formal (system documentation) and informal (mentoring) activities that help confirm that the "transfer to" resources are ready to assume responsibility for the new system and related processes.

Our knowledge transfer activities include the development of a knowledge transfer plan, identification of a core transition team and execution of the knowledge transfer plan. The knowledge transfer activities will occur over the life of the project.

The knowledge transfer process at a conceptual level involves three separate stages:

- Establish Knowledge Transfer Foundation
- Develop Knowledge Transfer Plan
- Execute Knowledge Transfer Plan

The Knowledge Transfer activities will occur throughout the nine month project schedule. The following diagram provides a high-level schedule of Knowledge Transfer activities.

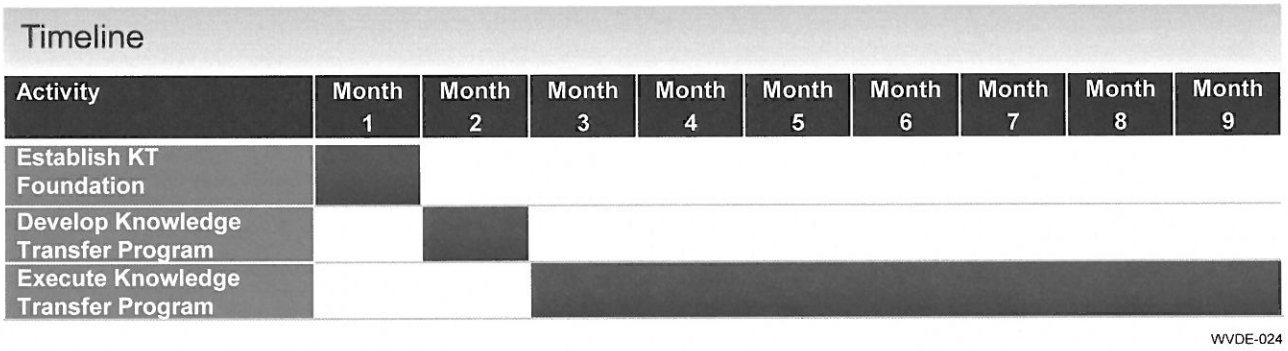


Figure 4.4.6-1. High-level Knowledge Transfer Schedule.

The following diagram describes the tasks associated with each of these activities.

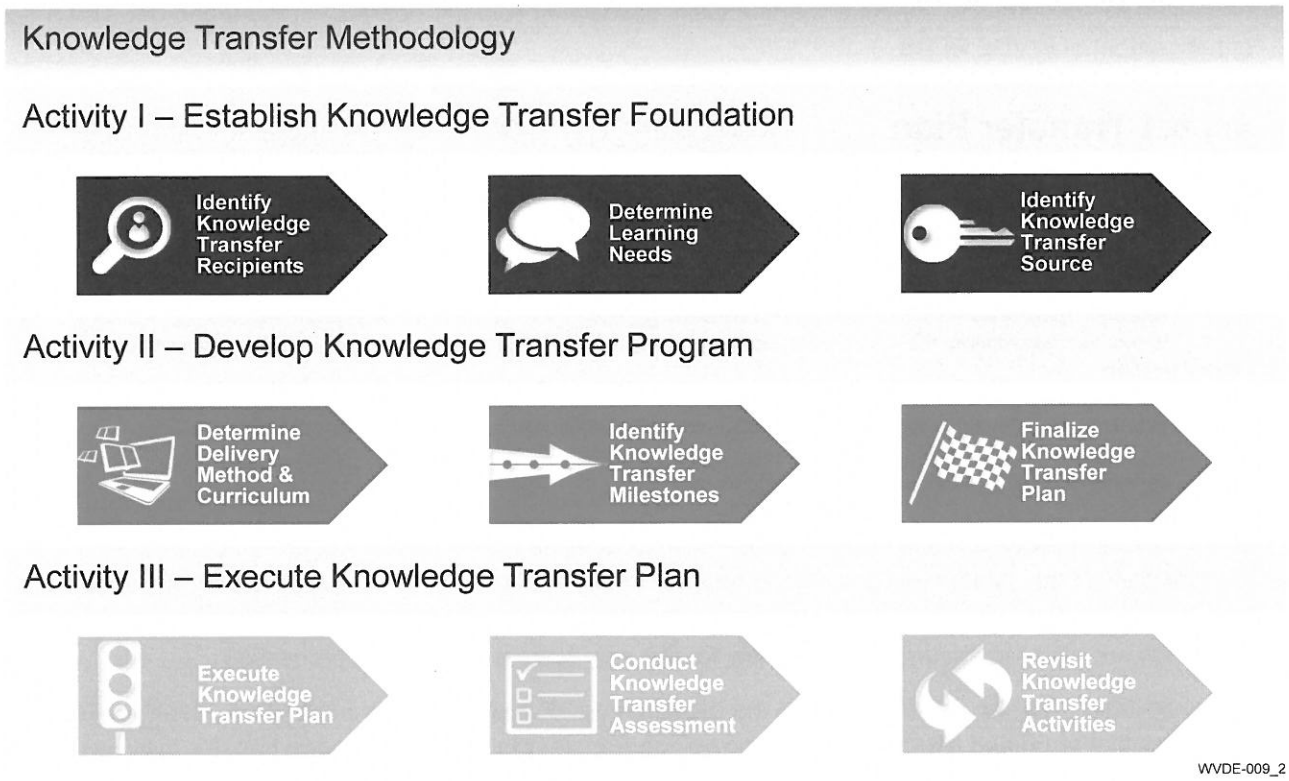


Figure 4.4.6-2. Knowledge Transfer.

In Activity 1, Establish Knowledge Transfer Foundation, we help establish the knowledge transfer foundation by identifying the basic principles of knowledge transfer services and those skill sets that are necessary for WVDE to manage SLDS at contract end. In Activity 2, Develop Knowledge Transfer Plan, we begin the process of creating the knowledge transfer program at the beginning of the project by identifying various system transition methods, determining milestones and criteria for assessing effectiveness, and resource

readiness, and completing the Knowledge Transfer plan. In Activity 3, Execute Knowledge Transfer Plan, we execute the knowledge transfer services and continue to work with WVDE to prioritize and evaluate the tasks and activities we are executing as part of the knowledge transfer process. The preceding figure provides a high-level depiction of our knowledge transfer methodology.

During the knowledge transfer process, the Deloitte/eScholar team provides the mechanisms for the appropriately identified "transition to" resources to gain the knowledge that is required to do their jobs effectively. The table below highlights some of the knowledge transfer activities the team will use, along with a description of each activity.

The following table describes the key potential activities in the Knowledge Transfer process. We will work with WVDE to determine what activities are most appropriate for their agency.

Activity	Description
Prerequisite Learning	A solid foundation in skills relevant to turnover activities will be important for those resources identified on the "transition to" team. Working with WV DOE, we will determine any prerequisite learning activities for "transition to" team members.
Documentation Review	This method involves the "transition to" resources thoroughly reviewing the available project and system documentation on the knowledge transfer topic. The Deloitte/eScholar Team will maintain the WV SLDS implementation and system documentation electronically, and it will be part of the project team's responsibility to keep this information up-to-date and precise so knowledge transfer activities can occur on an ongoing basis. The documentation review is critical to the successful completion of the majority of the knowledge transfer tasks and may result in questions that can be addressed using one of the other methods defined in this table.
Meeting/Discussion Forum	These forums allow the appropriate resources to openly discuss a turnover topic and provide firsthand accounts and explanations of important details related to the topic. Each meeting should have a defined agenda to control the scope of the discussion, and the participants should review related documentation prior to attending the meeting. Controlled scope and meeting preparation allow the discussion to be as productive as possible and allow those participating to truly get a grasp of the information being covered.
System or Tool Demonstration	Often considered informal or on-the-job training, this method consists of a demonstration of a component of the system or of a specific tool used to support the system or other project activities. It involves the visual presentation, as well as a detailed discussion of the topic. The participants should review relevant documentation prior to attending the demonstration so they have a basic understanding of the topic. This allows the participants to conduct an effective review of the details during the demonstration.
Mentoring, Job Shadowing, or Participation in Meetings and Activities	Mentoring and job shadowing involve having the resources that are responsible for turnover jointly participate in tasks, activities, and/or meetings during the course of the normal day. This allows these resources to learn firsthand and experience the project activities, operations, and discussions they will take over when turnover is complete. For mentoring to be most effective, it is important that thoroughly defined objectives be set up-front to effectively use the time of those involved. We take seriously our responsibility to prepare our counterparts and will take the approach of teaching the person working together to complete that task, and then having the person actually do the task independently.
Knowledge Transfer Assessment	At the conclusion of each phase, the Deloitte/eScholar Team will assess the knowledge transfer activities for that phase. The purpose of this assessment will be to measure the level of knowledge transfer to determine any additional areas that the team should focus on.
SLDS Transition Status Reports	Transition status reports will be completed and submitted to the WVDE Project Manager during the outgoing transition period. The Transition Status Report will contain details regarding knowledge transferred between Deloitte/eScholar and WVDE staff.

Figure 4.4.6-3. Knowledge Transfer Activities.

Knowledge transfer documents will be stored in the project document repository for easy access by team members. The schedule for knowledge transfer meetings will be developed as part of the plan including the meeting topics and the participants for each meeting.

Technical documentation and other knowledge transfer documents will be delivered in electronic and editable formats.

4.4.6.1.3 Maintenance Software

RFP Reference: Section 4.4. Qualifications and Experience, page, 32

4.4.6.1 To transfer the program and all associated deliverables to the WVDE by project conclusion. The responses to this objective should provide

- 4.4.6.1.3 Detailed information on maintenance for the software and hardware, if applicable, to successfully support the DWRS.

Detailed information on the maintenance and support for hardware and software can be found in *Section 4.4.2* of this proposal.

REQUEST FOR PROPOSAL

West Virginia Department of Education
RFP # EDD398772

Attachment B: Mandatory Specification Checklist

List mandatory specifications contained in Section 4, Subsection .5:

Section 4 - Subsection 4.5:

4.5.1 All aspects of the proposal must adhere to rules and regulations set forth in the, Child Information Protection Act (CIPA), Family Educational Rights and Privacy Act (FERPA), Child Online Protection Act (COPA), and Health Insurance Portability and Accountability Act (HIPAA).

THE SOLUTION SHALL NOT BE PROPRIETARY

Vendor Response: Deloitte's solution is not proprietary.

Section 4, Subsection 4.5:

4.5.2 Vendor must agree that the vendor-developed DWRS and all associated deliverables will be owned and operated by the WVDE upon project conclusion.

Vendor Response: Deloitte agrees that the vendor-developed DWRS and all associated deliverables will be owned and operated by the WVDE upon project conclusion.

Section 4, Subsection 4.5:

4.5.3 Vendor must relinquish ownership of the DWRS to the Agency upon project conclusion.

Vendor Response: Deloitte will relinquish ownership of the DWRS to the Agency upon project conclusion.

By signing below, I certify that I have reviewed this Request for Proposal in its entirety; understand the requirements, terms and conditions, and other information contained herein; that I am submitting this proposal for review and consideration; that I am authorized by the bidder to execute this bid or any documents related thereto on bidder's behalf; that I am authorized to bind the bidder in a contractual relationship; and that, to the best of my knowledge, the bidder has properly registered with any State agency that may require registration.

Deloitte Consulting LLP
(Company)

Philip S. Bernardy Director
(Representative Name, Title)

973-602-5311 / 908-803-0173
(Contact Phone/Fax Number)

October 09, 2013
(Date)

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Primary Target Table Type: DIMENSION

Field #	Start	End	Fixed Length, Scale	Delim Length, Scale	Field Name	Code	NCES Info	Lookup Name	Sample Value
1	1	8	8	20	DISTRICT CODE	K,M			ES001
2	9	14	6	12	LOCATION CODE	U,M	0146		10
3	15	24	10	10	SCHOOL YEAR DATE	K,M	0257		2005-06-30
4	25	36	12	12	STUDENT ID	K,M	0146		4321567890
5	37	47	11	11	SOCIAL SECURITY NUMBER	U	0146, 0147=00004		123-45-6789
6	48	56	9	9	FAMILY NUMBER	U	0146, 0147=00164		2347890
7	57	81	25	25	LAST NAME SHORT	U	0156		
8	82	96	15	15	FIRST NAME SHORT	U	0131		
9	97	97	1	1	MIDDLE INITIAL	U	0844		W
10	98	99	2	25	CURRENT GRADE LEVEL	U	0620	GRADE LEVEL	9
11	100	101	2	2	OBSOLETE	OBS			
12	102	105	4	4	OBSOLETE	OBS			
13	106	111	6	30	HOMEROOM	U			206A
14	112	121	10	10	BIRTH DATE	U	0314		1991-07-15
15	122	127	6	6	GENDER CODE	U	0851	GENDER CODE	M
16	128	157	30	40	ADDRESS 1	U	0272, 0025=00765		222 Main St.
17	158	187	30	40	ADDRESS 2	U	0037, 0025=00765		Apt. 107
18	188	212	25	30	CITY	U	0090, 0025=00765		White Plains
19	213	214	2	3	STATE CODE	U	0267, 0025=00765	STATE ABBR	NY
20	215	224	10	10	FULL ZIP CODE	U	0305, 0025=00765		10605-1513
21	225	238	14	14	HOME PHONE	U	0279, 0280=13324		(914) 555-1212
22	239	278	40	40	PRIMARY GUARDIAN NAME	U	0156 + 0131		Fred Harley
23	279	293	15	15	GUARDIAN RELATIONSHIP	U	0609	GUARDIAN RELATIONSHIP	P
24	294	307	14	14	GUARDIAN DAYTIME PHONE	U	0279		(914) 555-1212
25	308	322	15	15	STUDENT LIVES WITH	U	0609	GUARDIAN RELATIONSHIP	F

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Field #	Start	End	Fixed Length, Scale	Delim Length, Scale	Field Name	Code	NCES Info	Lookup Name	Sample Value
26	323	323	1	3	SINGLE PARENT HOUSEHOLD	U	0330, Opt=01040, 01042	YES NO CODE	Y
27	324	325	2	10	RACE OR ETHNICITY CODE	U	0849, 0310	RACE OR ETHNICITY	BL
28	326	365	40	40	OBSOLETE	OBS			
29	366	389	24	24	GEOGRAPHIC CODE PICKUP (BUS ROUTE)	U			ABC123
30	390	413	24	24	ROUTE)	U			ABC123
31	414	423	10	10	ZONE NUMBER	U	0306		39337
32	424	439	16	20	NATIVE LANGUAGE	U	0328, 0327=01038	LANGUAGE	67
33	440	451	12	12	FOOD PGM PARTICIPATION CODE	U	0607	FOOD CODE	F
34	452	481	30	30	CHALLENGE TYPE	U	0768	CHALLENGE TYPE	AUT
35	482	491	10	10	OBSOLETE	OBS			
36	492	501	10	10	OBSOLETE	OBS			
37	502	511	10	10	OBSOLETE	OBS			
38	512	514	3	4	SPECIAL EDUCATION	U	0771	SPECIAL EDUCATION CODE	Y
39	515	517	3	3	RELATED LEARNING	U	0273	YES NO CODE	
40	518	532	15	15	LEVEL OF INTEGRATION	U	0809	LEVEL OF INTEGRATION CODE	
41	533	535	3	3	LEP PARTICIPATION	U		ELL PARTICIPATION CODE	
42	536	537	2,0	2,0	DURATION OF LEP	U		LEP DURATION	2
43	538	539	2,0	2,0	STUDENT MOVES	U			5
44	540	542	3	3	TARGETED ASSISTANCE	U		YES NO CODE	Y
45	543	548	6	6	SPECIAL PROGRAM CODE	U	0810	STUDENT SPECIAL PROGRAM	C
46	549	551	3	3	REPEATING LAST YEAR	U		YES NO CODE	N
47	552	554	3	3	MERIT PROGRAM	U		MERIT CODE	Y
48	555	557	3	3	MAGNET PROGRAM	U		MAGNET CODE	Y

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Field #	Start	End	Fixed Length, Scale	Delim Length, Scale	Field Name	Code	NCES Info	Lookup Name	Sample Value
49	558	559	2	25	PREVIOUS GRADE LEVEL	U	0620	GRADE LEVEL	10
50	560	565	6	12	PREVIOUS LOCATION CODE	U	0146		75
51	566	573	8	20	PREVIOUS DISTRICT CODE	U			231
52	574	585	12	12	PREVIOUS STUDENT ID	U	0146		123456789
53	586	589	4	4	EXPECTED GRADUATION TIMEFRAME	U	0683	GRADUATION TIMEFRAME	2007
54	590	598	9,5	10,5	UNWEIGHTED GPA	U	0376		999.99999
55	599	607	9,5	10,5	WEIGHTED GPA	U			999.99999
56	608	614	7,3	8,3	CUMULATIVE CREDIT ATTEMPTED	U	0660		999.999
57	615	621	7,3	8,3	CUMULATIVE CREDIT EARNED	U	0664		999.999
58	622	626	5,0	5,0	CLASS RANK	U	0676		7
59	627	627	1	1	PROHIBIT INTERNET ACCESS INDICATOR	U			N
60	628	628	1	1	MINIMUM GPA INDICATOR	U			Y
61	629	637	9,5	10,5	MINIMUM GPA REQUIRED	U			999.99999
62	638	638	1	1	IMPACT PROGRAM	U			N
63	639	639	1	1	NCAA ELIGIBILITY	U			Y
64	640	640	1	1	STATE SCHOLARSHIP ELIGIBILITY	U			Y
65	641	641	1	3	GRADUATION STATUS CODE	U		GRADUATION STATUS	N
66	642	671	30	30	PLANNED POST GRADUATE ACTIVITY	U	0710, 0712	POST GRADUATE ACTIVITY CODE	MIL
67	672	672	1	15	STUDENT STATUS	U		STUDENT STATUS	A
68	673	682	10	10	LAST STATUS DATE	U			1999-07-01
69	683	686	4,0	5,0	CLASS SIZE	U	0677		200
70	687	687	1	3	ADA STATUS INDICATOR	U	0769	YES NO CODE	N
71	688	699	12	20	FREE BOOK CODE	U		BOOK CODE	Y
72	700	704	5,0	5,0	WEIGHTED CLASS RANK	U	0676		7
73	705	707	3	3	FOREIGN EXCHANGE STUDENT	U	0617, Opt=01819	YES NO CODE	Y

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74	708	717	10	10	CLASS RANK DATE	U	1438		1999-07-01
75	718	724	7,3	7,3	CUMULATIVE GRADE POINTS	U	0668		999.999
76	725	731	7,3	7,3	CUMULATIVE WEIGHTED GRADE POINTS	U			999.999
77	732	734	3	3	STANDARD PROGRAM	U		YES NO CODE	Y
78	735	737	3	3	COLLEGE PROGRAM	U		YES NO CODE	Y
79	738	740	3	3	HONORS PROGRAM	U	0674, Opt=01988	YES NO CODE	Y
80	741	743	3	3	GIFTED PARTICIPATION CODE	U	1363	GIFTED PARTICIPATION	2
81	744	746	3	20	HEALTH ALERT CODE	U		HEALTH ALERT	EPI
82	747	753	7,3	7,3	GRADE POINTS ADD-ON	U			999.999
83	754	763	10	10	SNAPSHOT DATE	N/A			
84	764	783	20	20	OBSOLETE	OBS			
85	784	793	10	10	OBSOLETE	OBS			
86	794	817	24	24	STUDENT CITIZENSHIP STATUS CODE	U	0322	CITIZENSHIP STATUS	US
87	818	824	7,3	8,3	GRAD REQUIREMENT	U			999.999
88	825	825	1	4	ECONOMIC DISADVANTAGED STATUS CODE	U	0605	POVERTY CODE	T
89	826	826	1	1	POPULATION CODE	U	0589, 0590, 0591	POPULATION CODE	1
90	827	827	1	1	MOBILITY CODE	U		MOBILITY TYPE	3
91	828	830	3	30	DIPLOMA TYPE CODE	U	0116	DIPLOMA TYPE CODE	H
92	831	833	3	3	SAFETY NET CODE	U		SAFETY NET CODE	1
93	834	858	25	25	ALTERNATE STUDENT ID	U	0146		
94	859	861	3	3	EXCLUDE FROM RANK	U		YES NO CODE	N
95	862	864	3	20	LEP/ELL ELIGIBILITY	U	0585	ELL ELIGIBILITY CODE	1
96	865	865	1	1	PROGRAM SERVICES CODE	U	0273	PROGRAM SERVICES CODE	1
97	866	875	10	10	GRADE 09 ENTRY DATE	U	0618		1996-09-01
98	876	885	10	10	DISTRICT ENTRY DATE	U	0616		1993-09-01

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Field #	Start	End	Fixed Length, Scale	Delim Length, Scale	Field Name	Code	NCES Info	Lookup Name	Sample Value
99	886	895	10	10	SCHOOL ENTRY DATE	U	0366		2004-09-01
100	896	915	20	20	MEMBERSHIP ID	U	0146, 0147=09999		
101	916	917	2	25	INITIAL GRADE LEVEL IN DISTRICT	U	0620	GRADE LEVEL	6
102	918	932	15	15	EDUCATION LEVEL OF PARENT	U	0332	PARENT EDUCATION LEVEL	GED
103	933	944	12	12	FAMILY IDENTIFIER	U	0146, 0147=00164		2347890
104	945	958	14	14	CONTACT PHONE	U	0279		555-421-4413
105	959	968	10	10	INOCULATION DATE	U	0354		1998-09-01
106	969	988	20	20	SERVICE PROVIDER	U	0146		100010011
107	989	1028	40	40	ALTERNATE GUARDIAN NAME	U	0156 + 0131		Joan Harley
108	1029	1078	50	50	PLACE OF BIRTH	U	0852 + 0318		Boston, MA
109	1079	1088	10	10	STATE ENTRY DATE	U			1993-08-01
110	1089	1098	10	10	INITIAL US ENTRY DATE	U	0325		
111	1099	1101	3	3	HOMELESS STATUS CODE	U	0589	HOMELESS CODE	N
112	1102	1109	8	8	MIGRANT STATUS CODE	U	0590, 0591	MIGRANT CODE	N
113	1110	1117	8	8	ENGLISH PROFICIENCY	U	0585	ENGLISH PROFICIENCY CODE	1633
114	1118	1121	4	10	RACE OR ETHNICITY SUBGROUP CODE	U	0850	RACIAL ETHNIC SUBGROUP	9
115	1122	1127	6	12	NEXT LOCATION CODE	U	0146		75
116	1128	1129	2	25	NEXT GRADE LEVEL	U	0620	GRADE LEVEL	12
117	1130	1137	8	20	DISTRICT CODE OF RESIDENCE	U	1134		ES099
118	1138	1177	40	40	COUNTY OF RESIDENCE	U	0186		Westchester
119	1178	1180	3	3	AT RISK STUDENT	U	1379	YES NO CODE	N
120	1181	1183	3	3	STUDENT IS A SINGLE PARENT	U	0330 + 0541	YES NO CODE	N
121	1184	1186	3	3	STUDENT IS PREGNANT	U		YES NO CODE	N
122	1187	1189	3	3	EDUCATIONALLY DISADVANTAGED	U		YES NO CODE	N

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Field #	Start	End	Fixed Length, Scale	Delim Length, Scale	Field Name	Code	NCES Info	Lookup Name	Sample Value
123	1190	1205	16	20	HOME LANGUAGE CODE	U	0328, 0327=01037	LANGUAGE	110
124	1206	1208	3	3	NEGLECTED OR DELINQUENT	U	1129	INDICATOR	N
125	1209	1212	4,0	4,0	YEARS IN US SCHOOLS	U			12
126	1213	1222	10	10	NAME SUFFIX	U	0135	NAME SUFFIX	II
127	1223	1282	60	75	FIRST NAME ALIAS	U	0189, 0033		Tom
128	1283	1285	3	3	SPECIAL EDUCATION TRANSITION	U	1138	YES NO CODE	N
129	1286	1291	6	6	GIFTED ELIGIBILITY CODE	U	1446	GIFTED ELIGIBILITY	INIT
130	1292	1294	3	20	REPORT PERIOD ATTENDANCE CODE	U		RPT PERIOD ATTEND	Y
131	1295	1297	3	3	FOOD PROGRAM ELIGIBILITY	U	0606	FOOD PGM ELIGIBILITY	F
132	1298	1300	3	3	PRE-K PROGRAM CODE	U		PRE-K PROGRAM CODE	5
133	1301	1360	60	75	LAST NAME LONG	U	0156		Harley
134	1361	1420	60	75	FIRST NAME LONG	U	0131		Thomas
135	1421	1424	4	4	COUNTRY OF ORIGIN CODE	U		COUNTRY CODE	1440
136	1425	1428	4	4	COUNTRY OF BIRTH CODE	U	0320	COUNTRY CODE	1440
137	1429	1431	3,0	3,0	FTE PERCENT	U	0622		100
138	1432	1441	10	10	NAME SUFFIX ALIAS	U	0033	NAME SUFFIX	
139	1442	1501	60	75	LAST NAME ALIAS	U	0033		
140	1502	1561	60	75	MIDDLE NAME ALIAS	U			
141	1562	1571	10	10	MOST RECENT ENTRY TO US DATE	U			
142	1572	1631	60	75	MIDDLE NAME	U	0184		William
143	1632	1635	4	4	CREDENTIAL TYPE CODE	U	0116	CODE	2
144	1636	1638	3	3	HISPANIC ETHNICITY INDICATOR	U	0310	YES NO CODE	N
145	1639	1641	3	3	OBSOLETE	OBS			
146	1642	1643	2	10	RACE 2 CODE	U	0849	RACE OR ETHNICITY	22
147	1644	1645	2	10	RACE 3 CODE	U	0849	RACE OR ETHNICITY	33
148	1646	1647	2	10	RACE 4 CODE	U	0849	RACE OR ETHNICITY	44
149	1648	1649	2	10	RACE 5 CODE	U	0849	RACE OR ETHNICITY	55

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Field #	Start	End	Fixed Length, Scale	Delim Length, Scale	Field Name	Code	NCES Info	Lookup Name	Sample Value
150	1650	1652	3	3	FEDERAL FORM 506 INDICATOR	U		YES NO CODE	
151	1653	1656	4	5	PERSONAL INFORMATION VERIFICATION CODE	U	0315	PERSONAL INFORMATION VERIFICATION	PSPT
152	1657	1659	3	3	IMMIGRANT INDICATOR	U		YES NO CODE	N
153	1660	1675	16	20	PRIMARY LANGUAGE CODE	U	0328, 0327=01036	LANGUAGE	
154	1676	1705	30	40	ADDRESS 3	U	0081, 0025=00765		
155	1706	1710	5	5	BASE ZIP CODE	U	0305, 0025=00765		10605
156	1711	1714	4	4	ZIP CODE +4	U	4136		1513
157	1715	1754	40	40	MAILING ADDRESS 1	U	0272, 0025=00123		222 Main St.
158	1755	1794	40	40	MAILING ADDRESS 2	U	0037, 0025=00123		Suite 107
159	1795	1824	30	40	MAILING ADDRESS 3	U	0081, 0025=00123		
160	1825	1854	30	30	MAILING ADDRESS CITY	U	0090, 0025=00123		White Plains
161	1855	1856	2	3	MAILING ADDRESS STATE CODE	U	0267, 0025=00123	STATE ABBR	NY
162	1857	1861	5	5	MAILING ADDRESS ZIP CODE	U	0305, 0025=00123		10605
163	1862	1865	4	4	MAILING ADDRESS ZIP CODE +4	U	4136		1513
164	1866	1873	8	8	ADA PRIMARY DISABILITY CODE	U		ADA DISABILITY	CAN
165	1874	1885	12	12	LOCATION CODE OF RESIDENCE	U			
166	1886	1888	3	3	DISPLACED HOMEMAKER	U		YES NO CODE	N
167	1889	1892	4	4	SPED REFERRAL CODE	U		SPED REFERRAL CODE	C
168	1893	1952	60	60	NEIGHBORHOOD	U	0202		West Side
169	1953	1964	12	12	GRADE K LOCATION CODE	U			
170	1965	1976	12	12	GRADE 01 LOCATION CODE	U			
171	1977	1988	12	12	GRADE 02 LOCATION CODE	U			
172	1989	2018	30	30	CITY OF BIRTH	U	0852		Harrison
173	2019	2020	2	3	STATE CODE OF BIRTH	U	0318		NY

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174	2021	2028	8	20	DWELLING ARRANGEMENT CODE	U	0600	DWELLING ARRANGEMENT	FAMRES
175	2029	2036	8	8	COURSE OF STUDY CODE	U		COURSE OF STUDY	COLLPREP
176	2037	2048	12	12	GUIDANCE COUNSELOR ID	U			12345678
177	2049	2060	12	12	FUNDING LOCATION CODE	U			
178	2061	2063	3	3	MATH APPEAL SUCCESSFUL INDICATOR	U		YES NO NA	N/A
179	2064	2066	3	3	ELA APPEAL SUCCESSFUL INDICATOR	U		YES NO NA	Y
180	2067	2069	3	3	SCIENCE APPEAL SUCCESSFUL INDICATOR	U		YES NO NA	N/A
181	2070	2072	3	3	SOCIAL STUDIES APPEAL SUCCESSFUL INDICATOR	U		YES NO NA	N/A
182	2073	2080	8	8	HOME ADDRESS STATE COUNTY CODE	U	0113, 0025=00765	COUNTY	66
183	2081	2085	5	5	HOME ADDRESS ANSI COUNTY CODE	U	0100, 0025=00765		36119
184	2086	2093	8	8	MAILING ADDRESS STATE COUNTY CODE	U	0113, 0025=00123	COUNTY	66
185	2094	2098	5	5	MAILING ADDRESS ANSI COUNTY CODE	U	0100, 0025=00123		36119
186	2099	2108	10	10	STUDENT SNAPSHOT PERIOD LEVEL	N/A			Day
187	2109	2120	12	12	PROMOTION RETENTION REASON CODE	U	0673	PROMOTION RETENTION REASON	
188	2121	2123	3	3	HOME SCHOOLED INDICATOR	U		YES NO CODE	
189	2124	2143	20	20	FUNDING DISTRICT CODE	U			ES002
190	2144	2146	3	3	CTE INDICATOR	U		YES NO CODE	Y
191	2147	2149	3	3	MULTIPLE BIRTH INDICATOR	U	1313	YES NO CODE	N
192	2150	2229	80	250	EMAIL ADDRESS	U	0120		tharley@district.k12.us
193	2230	2234	5,1	5,1	STUDENT HEIGHT	U	0726		999.9
194	2235	2239	5,1	5,1	STUDENT WEIGHT	U	0727		999.9
195	2240	2259	20	20	IMMUNIZATION STATUS CODE	U	0355	IMMUNIZATION STATUS	COMP
196	2260	2279	20	20	HEALTH INSURANCE STATUS CODE	U	0347	HEALTH INSURANCE STATUS	CHIP

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Field #	Start	End	Fixed Length, Scale	Delim Length, Scale	Field Name	Code	NCES Info	Lookup Name	Sample Value
197	2280	2282	3	20	UNACCOMPANIED YOUTH TYPE CODE	U	1425	UNACCOMPANIED YOUTH	N
198	2283	2292	10	30	NAME PREFIX	U	0207	NAME PREFIX	Mr.
199	2293	2296	4	4	COUNTRY CODE	U	0099, 0025=00765	COUNTRY CODE	US
200	2297	2300	4	4	MAILING ADDRESS COUNTRY CODE	U	0099, 0025=00123	COUNTRY CODE	US
201	2301	2310	10	10	INITIAL US SCHOOL ENROLLMENT DATE	U	1119		1996-09-04
202	2311	2330	20	20	ABILITY GROUPED STATUS CODE	U	1428	ABILITY GROUPED STATUS	MATH
203	2331	2390	60	75	PREVIOUS LAST NAME	U	0132		Jones
204	2391	2410	20	20	STATE RESIDENCY CODE	U		STATE RESIDENCY	INSTOUTDIST
205	2411	2430	20	20	INCOME STATUS CODE	U	0604	INCOME STATUS	SMI75
206	2431	2433	3,0	3,0	FAMILY SIZE	U			4
207	2434	2453	20	20	MILITARY FAMILY CODE	U		MILITARY FAMILY	ACTIVE
208	2454	2473	20	20	ASYLEE OR REFUGEE STATUS CODE	U		ASYLEE REFUGEE	A
209	2474	2476	3	3	FOSTER CARE INDICATOR	U		INDICATOR	N
210	2477	2496	20	20	CRISIS IMPACT CODE	U		CRISIS IMPACT	N/A
211	2497	2746	250	250	STUDENT PHOTO LINK	U			
212	2747	2766	20	20	ASSESSMENT PARTICIPATION CODE	U		ASSESSMENT PARTICIPATION	ALTONLY

Description

This template defines the Student dimension table. This table describes the demographic details for each student, one entry per school year.

Rule #	Rule
1	LOCATION CODE may optionally be validated by checking that the Location is open for the period denoted by SCHOOL YEAR DATE; the LOC_OPEN_DATE and LOC_CLOSE_DATE Columns in the Location Table are used for this validation.

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2	SCHOOL YEAR DATE is the date of the last day of the school year in ISO format: YYYY-06-30								
3	Only one of LAST NAME/LAST NAME LONG and FIRST NAME/FIRST NAME LONG should be supplied								
4	LAST NAME LONG checked first; if not supplied, LAST NAME SHORT is used								
5	FIRST NAME LONG checked first; if not supplied, FIRST NAME SHORT is used								
6	New clients recommended to use LAST NAME LONG and FIRST NAME LONG								
7	A STUDENT_NAME Column is generated by combining the LAST NAME ', ' FIRST NAME values with customizable capitalization								
8	Date fields (field name ends in DATE) must be in ISO format: YYYY-MM-DD								
9	BIRTH DATE must be within a range specified by the client; the default range is 1971-01-01 to current date								
10	Zip code information for home address can be supplied by component (BASE ZIP CODE and ZIP CODE +4) or as a single FULL ZIP CODE.								
11	If components only are supplied, a FULL ZIP CODE is generated by combining BASE ZIP CODE, '-', and ZIP CODE +4								
12	The non-null values in RACE OR ETHNICITY CODE and RACE 2 CODE through RACE 5 CODE must be unique; if not, the record is rejected								
13	PREVIOUS LOCATION CODE, NEXT LOCATION CODE, GRADE K LOCATION CODE, GRADE 01 LOCATION CODE, GRADE 02 LOCATION CODE and FUNDING LOCATION CODE may be optionally validated against the LOCATION Table								
14	PREVIOUS DISTRICT CODE may be optionally validated against the DISTRICT Table								
15	PREVIOUS LOCATION CODE may be optionally validated against the LOCATION Table, using PREVIOUS DISTRICT CODE if supplied, else using DISTRICT CODE								
16	For fixed-width files, UNWEIGHTED GPA, WEIGHTED GPA, and MINIMUM GPA REQUIRED can support up to 4 digits to the left of the decimal or up to 5 digits to the right of the decimal within the field length of 9								
17	For fixed-width files, CUMULATIVE CREDIT ATTEMPTED, CUMULATIVE CREDIT EARNED, and GRAD REQUIREMENT can support up to 4 digits to the left of the decimal or up to 3 digits to the right of the decimal within the field length of 7								
18	Code Column: N/A - SNAPSHOT DATE and STUDENT SNAPSHOT PERIOD LEVEL are present for compatibility with the STUDENT SNAPSHOT Template and both fields are ignored								
19	If FAMILY IDENTIFIER is not supplied, FAMILY NUMBER is used								
20	If both supplied, INOCULATION DATE must be greater than or equal to BIRTH DATE								
21	Place of birth may be supplied by component (CITY OF BIRTH, STATE CODE OF BIRTH), or as a single PLACE OF BIRTH. Recommend tracking COUNTRY OF BIRTH CODE separately.								
22	If components only are supplied, a PLACE OF BIRTH is generated by combining CITY OF BIRTH, ', ', and STATE CODE OF BIRTH								
23	If both supplied, MOST RECENT ENTRY TO US DATE must be greater than or equal to INITIAL US ENTRY DATE								

STUDENT

Template Group: WAREHOUSE 15.0
Data Domain(s): STUDENT
Target Table(s): STUDENT
EDM File ID: STUDENT

Last Generated: 2013-06-30
Minimum Compatible Version: 15.0

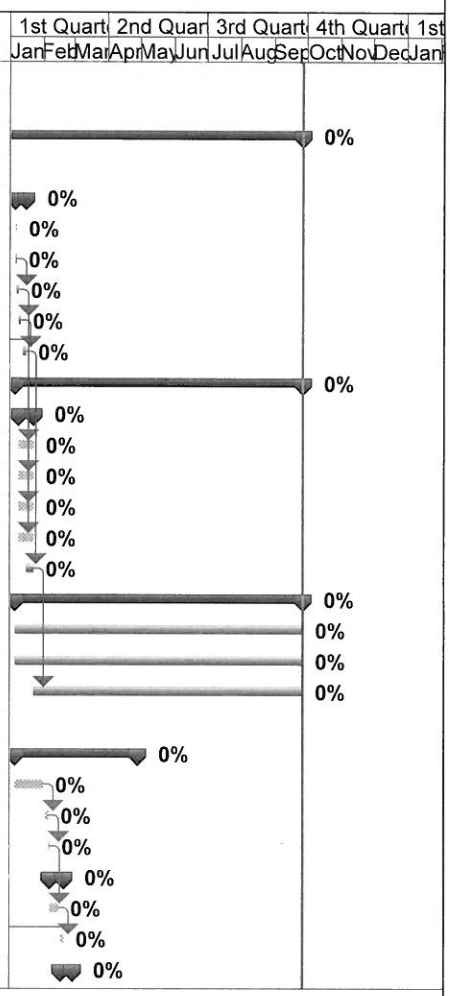
Primary Target Table Type: DIMENSION

Field #	Start	End	Fixed Length, Scale	Delim Length, Scale	Field Name	Code	NCES Info	Lookup Name	Sample Value
24	DISTRICT CODE OF RESIDENCE may be optionally validated against the DISTRICT Table where the RESIDENCE DISTRICT INDICATOR = YES (case ignored)								
25	LOCATION CODE OF RESIDENCE may be optionally validated against the LOCATION Table, using DISTRICT CODE OF RESIDENCE if supplied, else using DISTRICT CODE								
26	FUNDING LOCATION CODE may be optionally validated against the LOCATION Table, using FUNDING DISTRICT CODE if supplied, else using DISTRICT CODE								
27	If supplied, HOME ADDRESS ANSI COUNTY CODE and MAILING ADDRESS ANSI COUNTY CODE must be exactly 5 digits in length and be composed of all numbers (0-9)								
28	FUNDING DISTRICT CODE may be optionally validated against the DISTRICT Table where the FUNDING DISTRICT INDICATOR = YES (case ignored)								
29	When a record is updated and LAST NAME, BIRTH DATE, and CURRENT GRADE LEVEL are all different than the existing Table record, a warning is generated								
30	The fields identified with an NCES code are recommended to follow the NCES Non-Fiscal Data Handbook v10.0								
31	Code Column: K - component of primary key, U - value is updated if row exists, M - a value must be supplied, OBS - field is Obsolete								
32	Data can be supplied in either ASCII or EBCDIC flat file or delimited formats. Full delimiter support is available.								

Load Sequence	Lookup	Optional
1. DISTRICT	N	N
2. CALENDAR PERIOD	N	N
3. MASTER LOOKUP CODE	Y	Y
4. LOCATION	N	N
5. STAFF	N	Y

WVDE SLDS Project Plan

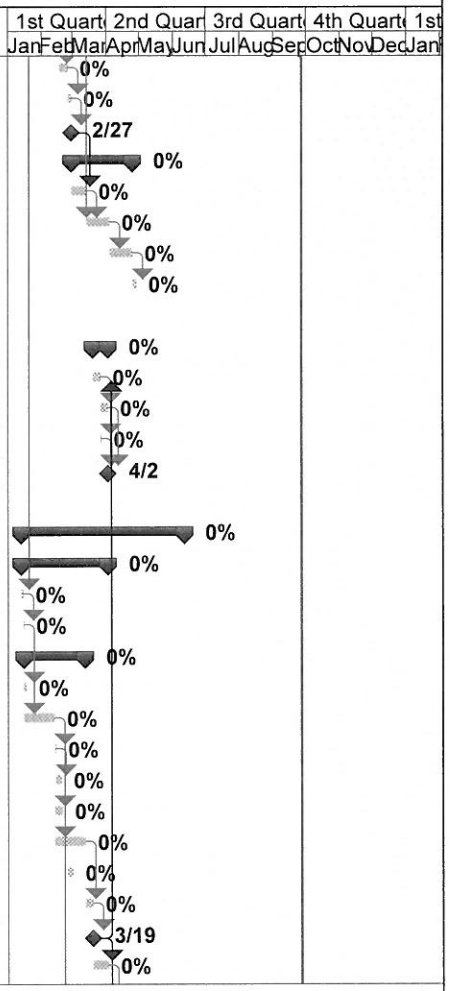
ID	Task Name	Duration	Start	Finish	Predecessors
1					
2					
3	**WVDE SLDS Project**	**993 days**	**Wed 12/8/10**	**Fri 9/26/14**	
4					
5	**Project Initiation**	**8 days**	**Mon 1/6/14**	**Wed 1/15/14**	
6	PMO Standup	1 day	Mon 1/6/14	Mon 1/6/14	
7	Conduct Project Kickoff Meeting	1 day	Mon 1/6/14	Mon 1/6/14	
8	Finalize Project Scope	2 days	Tue 1/7/14	Wed 1/8/14	7
9	Finalize Project Work Breakdown Structure (WBS)	2 days	Thu 1/9/14	Fri 1/10/14	8
10	State Review and Sign Off on Final Project Work Plan	3 days	Mon 1/13/14	Wed 1/15/14	9
11	**Project Management**	**190 days**	**Mon 1/6/14**	**Fri 9/26/14**	
12	**Management Plans**	**10 days**	**Thu 1/9/14**	**Wed 1/22/14**	
13	Develop PM Communications Management Plan	10 days	Thu 1/9/14	Wed 1/22/14	8
14	Develop Change Control Plan	10 days	Thu 1/9/14	Wed 1/22/14	8
15	Develop Quality Assurance (QA) Management Plan	10 days	Thu 1/9/14	Wed 1/22/14	8
16	Develop Knowledge Transfer Plan	10 days	Thu 1/9/14	Wed 1/22/14	8
17	State Review and Sign Off on Project Plan	5 days	Thu 1/16/14	Wed 1/22/14	10
18	**On-going activities**	**190 days**	**Mon 1/6/14**	**Fri 9/26/14**	
19	Project Management	190 days	Mon 1/6/14	Fri 9/26/14	
20	Weekly Status Meetings	190 days	Mon 1/6/14	Fri 9/26/14	
21	Knowledge Transfer to WDVE staff	177 days	Thu 1/23/14	Fri 9/26/14	17
22					
23	**Infrastructure**	**80.5 days**	**Mon 1/6/14**	**Mon 4/28/14**	
24	Procure Hardware and Software	20 days	Mon 1/6/14	Fri 1/31/14	
25	Install All Hardware	3 days	Mon 2/3/14	Wed 2/5/14	24
26	Install and Configure SQL Server RDBMS	1 day	Thu 2/6/14	Thu 2/6/14	25
27	**Establish Test Environment**	**9 days**	**Fri 2/7/14**	**Wed 2/19/14**	
28	Install eScholar Products	6 days	Fri 2/7/14	Fri 2/14/14	26
29	Install Cognos	3 days	Mon 2/17/14	Wed 2/19/14	28
30	**Establish Production Environment**	**9 days**	**Mon 2/17/14**	**Thu 2/27/14**	



Critical		Finish-only		Manual Summary	
Critical Split		Duration-only		Project Summary	
Critical Progress		Baseline		External Tasks	
Task		Baseline Split		External Milestone	
Split		Baseline Milestone		Inactive Task	
Task Progress		Milestone		Inactive Milestone	
Manual Task		Summary Progress		Inactive Summary	
Start-only		Summary		Deadline	

WVDE SLDS Project Plan

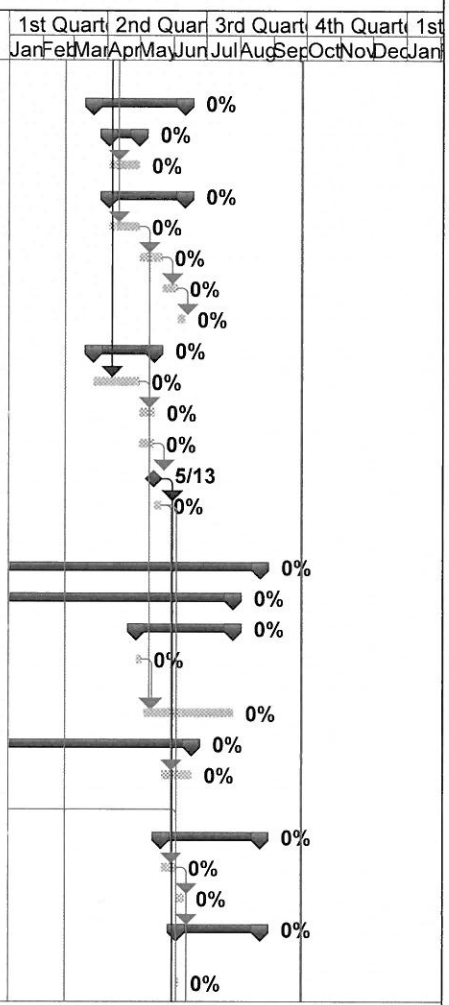
ID	Task Name	Duration	Start	Finish	Predecessors
31	Install eScholar Products	6 days	Mon 2/17/14	Mon 2/24/14	28
32	Install Cognos	3 days	Tue 2/25/14	Thu 2/27/14	31
33	Deliverable - Installation of Longitudinal Data System	0 days	Thu 2/27/14	Thu 2/27/14	32
34	**Security Integration**	**40 days**	**Fri 2/28/14**	**Thu 4/24/14**	
35	Develop Security integration design for eScholar and Cognos	10 days	Fri 2/28/14	Thu 3/13/14	33
36	Build security integration interface for eScholar and Cognos	15 days	Fri 3/14/14	Thu 4/3/14	28,35
37	Test security integration for eScholar and Cognos	15 days	Fri 4/4/14	Thu 4/24/14	36
38	State Review and Sign Off on Security Integration	1.5 days	Fri 4/25/14	Mon 4/28/14	37
39					
40	**System Configuration**	**10 days**	**Wed 3/19/14**	**Wed 4/2/14**	
41	Configure Data Collections	5 days	Wed 3/19/14	Wed 3/26/14	59
42	Configure Data Validations	5 days	Wed 3/26/14	Wed 4/2/14	41
43	Configure Data Manager	1 day	Wed 3/26/14	Thu 3/27/14	41
44	Deliverable - System Configuration	0 days	Wed 4/2/14	Wed 4/2/14	41,42,43
45					
46	**Requirements**	**107.5 days**	**Mon 1/13/14**	**Wed 6/11/14**	
47	**Requirements Definition**	**57.5 days**	**Mon 1/13/14**	**Wed 4/2/14**	
48	Identify Requirements Session Participants	2 days	Mon 1/13/14	Tue 1/14/14	9
49	Schedule Requirements Sessions	0.5 days	Wed 1/15/14	Wed 1/15/14	48
50	**Conduct Requirements Sessions**	**40 days**	**Wed 1/15/14**	**Wed 3/12/14**	
51	Identify Data Collections	2 days	Wed 1/15/14	Fri 1/17/14	49
52	Develop data requirements for each collection	20 days	Wed 1/15/14	Wed 2/12/14	49
53	Map Data to Source Systems	1 day	Wed 2/12/14	Thu 2/13/14	52
54	Finalize source systems list for WVDE SLDS	3 days	Thu 2/13/14	Tue 2/18/14	53
55	Develop List of 50 Reports	5 days	Wed 2/12/14	Wed 2/19/14	52
56	Develop Requirements for 50 Reports	20 days	Wed 2/12/14	Wed 3/12/14	52
57	Develop Security Requirements	5 days	Mon 2/24/14	Fri 2/28/14	
58	Document Requirements	5 days	Wed 3/12/14	Wed 3/19/14	56
59	Deliverable - Requirements Definition	0 days	Wed 3/19/14	Wed 3/19/14	58
60	WVDE reviews Requirements document	10 days	Wed 3/19/14	Wed 4/2/14	59



Critical		Finish-only		Manual Summary	
Critical Split		Duration-only		Project Summary	
Critical Progress		Baseline		External Tasks	
Task		Baseline Split		External Milestone	
Split		Baseline Milestone	◇	Inactive Task	
Task Progress		Milestone	◆	Inactive Milestone	
Manual Task		Summary Progress		Inactive Summary	
Start-only	⊏	Summary		Deadline	

WVDE SLDS Project Plan

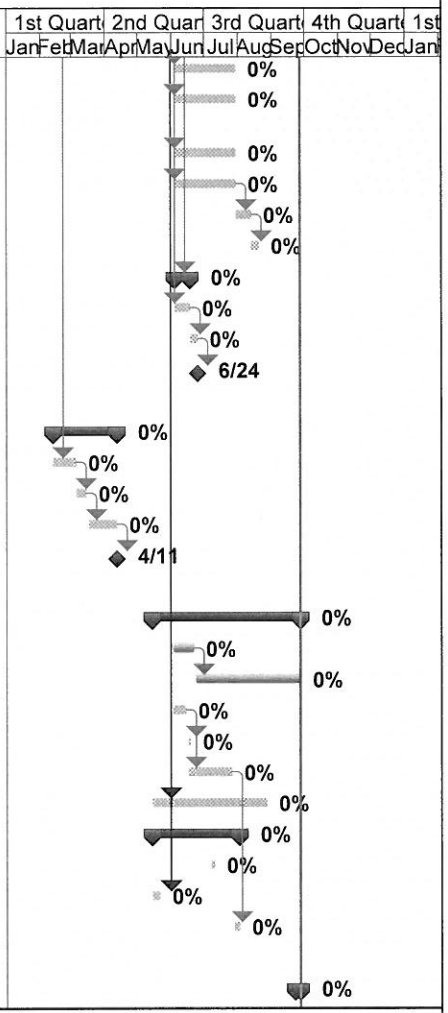
ID	Task Name	Duration	Start	Finish	Predecessors
61					
62	**Detail Design and Extract Specifications**	**60 days**	**Wed 3/19/14**	**Wed 6/11/14**	
63	**Solution Design**	**20 days**	**Wed 4/2/14**	**Wed 4/30/14**	
64	Determine Data Collection and Loading Schedule	20 days	Wed 4/2/14	Wed 4/30/14	60
65	**Data Dictionary and Extract Specifications**	**50 days**	**Wed 4/2/14**	**Wed 6/11/14**	
66	Map data requirements to eScholar Integration Templates	20 days	Wed 4/2/14	Wed 4/30/14	60
67	Identify Business rules	15 days	Wed 4/30/14	Wed 5/21/14	66
68	Identify Lookup and Dimension Values	10 days	Wed 5/21/14	Wed 6/4/14	67
69	State Review of Extract Specifications	5 days	Wed 6/4/14	Wed 6/11/14	68
70	**Report Design**	**40 days**	**Wed 3/19/14**	**Wed 5/14/14**	
71	Design 50 Reports	30 days	Wed 3/19/14	Wed 4/30/14	59
72	Design Reporting semantic layer updates and enhancements	10 days	Wed 4/30/14	Wed 5/14/14	71
73	Design Reporting Security	10 days	Wed 4/30/14	Tue 5/13/14	
74	Deliverable - Design Document	0 days	Tue 5/13/14	Tue 5/13/14	73
75	Final State Sign off on Design Documents	5 days	Wed 5/14/14	Tue 5/20/14	74
76					
77	**Build**	**965 days**	**Wed 12/8/10**	**Tue 8/19/14**	
78	**Development**	**948 days**	**Wed 12/8/10**	**Fri 7/25/14**	
79	**Develop Source System Extracts for DW**	**65 days**	**Mon 4/28/14**	**Fri 7/25/14**	
80	eScholar Integration Template Training for Source System Owners	5 days	Mon 4/28/14	Fri 5/2/14	
81	WVDE Develops Source System Extracts	60 days	Mon 5/5/14	Fri 7/25/14	66,80
82	**Report Development**	**920 days**	**Wed 12/8/10**	**Tue 6/17/14**	
83	Develop reporting semantic layer	20 days	Wed 5/21/14	Tue 6/17/14	75
84	Develop Cognos Reports	35 days	Wed 12/8/10	Tue 1/25/11	
85	**Testing**	**65 days**	**Wed 5/21/14**	**Tue 8/19/14**	
86	Develop Test Plan	10 days	Wed 5/21/14	Tue 6/3/14	75
87	State Review and Sign Off on Test Plan	5 days	Wed 6/4/14	Tue 6/10/14	86
88	**Load & Process Extract Files from Source systems in Test Environment**	**55 days**	**Wed 6/4/14**	**Tue 8/19/14**	**86**
89	Load Lookups and Dimensions	2 days	Wed 6/4/14	Thu 6/5/14	



Critical		Finish-only		Manual Summary	
Critical Split		Duration-only		Project Summary	
Critical Progress		Baseline		External Tasks	
Task		Baseline Split		External Milestone	
Split		Baseline Milestone		Inactive Task	
Task Progress		Milestone		Inactive Milestone	
Manual Task		Summary Progress		Inactive Summary	
Start-only		Summary		Deadline	

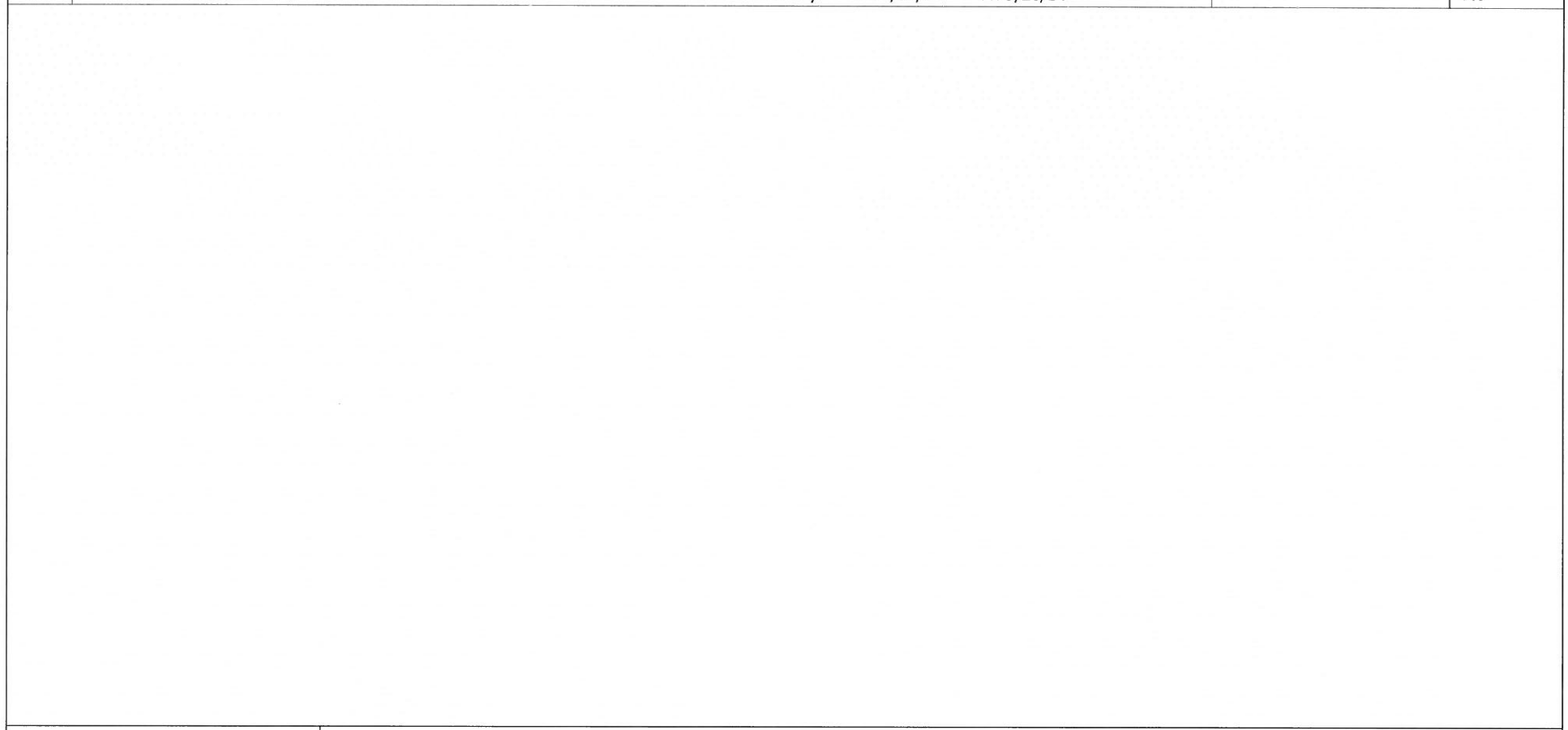
WVDE SLDS Project Plan

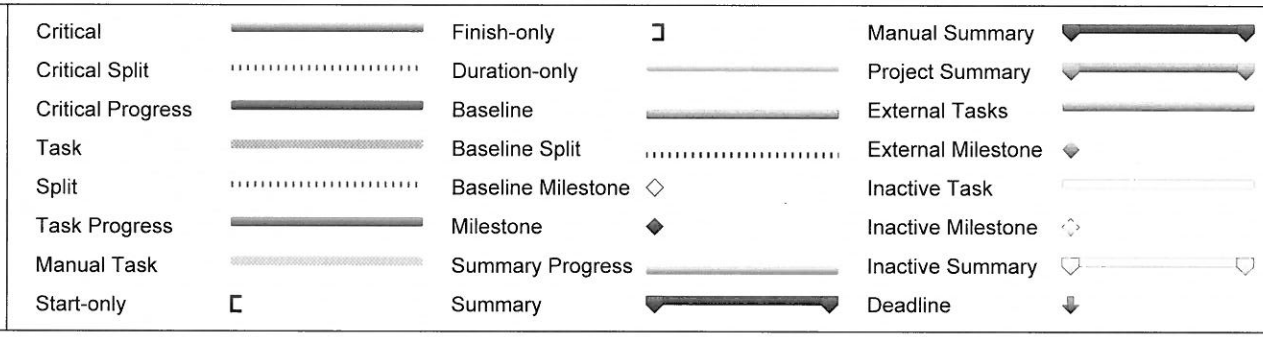
ID	Task Name	Duration	Start	Finish	Predecessors
90	Load Extracts (iterative)	40 days	Wed 6/4/14	Tue 7/29/14	75
91	Provide immediate feedback on data errors and extract format issues (iterative)	40 days	Wed 6/4/14	Tue 7/29/14	75
92	Load revised extracts (iterative)	40 days	Wed 6/4/14	Tue 7/29/14	75
93	Validate data as it is being loaded (iterative)	40 days	Wed 6/4/14	Tue 7/29/14	75
94	User acceptance Testing	10 days	Wed 7/30/14	Tue 8/12/14	93
95	State Sign-Off on Extract and Load Testing	5 days	Wed 8/13/14	Tue 8/19/14	94
96	**Reports Testing**	**10 days**	**Wed 6/4/14**	**Tue 6/17/14**	**86**
97	Cognos Reports Testing	10 days	Wed 6/4/14	Tue 6/17/14	84
98	State Review and Sign Off on Test Execution Documentation	5 days	Wed 6/18/14	Tue 6/24/14	97
99	Deliverable - Data Validation Reports	0 days	Tue 6/24/14	Tue 6/24/14	98
100					
101	**EDEN/EDFacts Module**	**42.5 days**	**Wed 2/12/14**	**Fri 4/11/14**	
102	Identify EDEN file data requirements	15 days	Wed 2/12/14	Wed 3/5/14	52
103	Identify EDEN file data sources	7.5 days	Wed 3/5/14	Fri 3/14/14	102
104	EDEN/EDFacts Configuration	20 days	Mon 3/17/14	Fri 4/11/14	103
105	Deliverable - EDEN/EDFacts Module	0 days	Fri 4/11/14	Fri 4/11/14	104
106					
107	**Communications and TTT Training**	**98 days**	**Wed 5/14/14**	**Fri 9/26/14**	
108	Develop Communications Plan	15 days	Mon 6/2/14	Fri 6/20/14	
109	Support Communications Activities	70 days	Mon 6/23/14	Fri 9/26/14	108
110	Finalize Training Plan	10 days	Mon 6/2/14	Fri 6/13/14	
111	Identify WDVE Training Participants	2 days	Mon 6/16/14	Tue 6/17/14	110
112	Develop Reporting Training	30 days	Mon 6/16/14	Fri 7/25/14	110
113	Support for Source System Owners	75 days	Wed 5/14/14	Tue 8/26/14	74
114	**Training**	**58 days**	**Wed 5/14/14**	**Fri 8/1/14**	
115	System Administrator Training	3 days	Mon 7/7/14	Wed 7/9/14	
116	eScholar Template Training for Source System Owners	5 days	Wed 5/14/14	Tue 5/20/14	74
117	Train-the Trainer Training for Reporting	5 days	Mon 7/28/14	Fri 8/1/14	112
118					
119	**Transition**	**5 days**	**Mon 9/22/14**	**Fri 9/26/14**	



Critical		Finish-only		Manual Summary	
Critical Split		Duration-only		Project Summary	
Critical Progress		Baseline		External Tasks	
Task		Baseline Split		External Milestone	
Split		Baseline Milestone		Inactive Task	
Task Progress		Milestone		Inactive Milestone	
Manual Task		Summary Progress		Inactive Summary	
Start-only		Summary		Deadline	

ID	Task Name	Duration	Start	Finish	Predecessors
120	Document Lessons Learned	2 days	Mon 9/22/14	Tue 9/23/14	
121	Deloitte Team Rolls-Off	1 day	Fri 9/26/14	Fri 9/26/14	





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Z125-3301-14

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During the Warranty Period, IBM provides Licensee with access to IBM databases containing information on known Program defects, defect corrections, restrictions, and bypasses at no additional charge. Consult the IBM Software Support Handbook for further information at www.ibm.com/software/support.

If the Program does not function as warranted during the Warranty Period and the problem cannot be resolved with information available in the IBM databases, Licensee may return the Program and its PoE to the party (either IBM or its reseller) from whom Licensee obtained it and receive a refund of the amount Licensee paid. After returning the Program, Licensee's license terminates. If Licensee downloaded the Program, Licensee should contact the party from whom Licensee obtained it for instructions on how to obtain the refund.

8.2 Exclusions

THESE WARRANTIES ARE LICENSEE'S EXCLUSIVE WARRANTIES AND REPLACE ALL OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING, BUT

NOT LIMITED TO, ANY IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY, SATISFACTORY QUALITY, FITNESS FOR A PARTICULAR PURPOSE, TITLE, AND ANY WARRANTY OR CONDITION OF NON-INFRINGEMENT. SOME STATES OR JURISDICTIONS DO NOT ALLOW THE EXCLUSION OF EXPRESS OR IMPLIED WARRANTIES, SO THE ABOVE EXCLUSION MAY NOT APPLY TO LICENSEE. IN THAT EVENT, SUCH WARRANTIES ARE LIMITED IN DURATION TO THE WARRANTY PERIOD. NO WARRANTIES APPLY AFTER THAT PERIOD. SOME STATES OR JURISDICTIONS DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO LICENSEE.

THESE WARRANTIES GIVE LICENSEE SPECIFIC LEGAL RIGHTS. LICENSEE MAY ALSO HAVE OTHER RIGHTS THAT VARY FROM STATE TO STATE OR JURISDICTION TO JURISDICTION.

THE WARRANTIES IN THIS SECTION 8 (WARRANTY AND EXCLUSIONS) ARE PROVIDED SOLELY BY IBM. THE DISCLAIMERS IN THIS SUBSECTION 8.2 (EXCLUSIONS), HOWEVER, ALSO APPLY TO IBM'S SUPPLIERS OF THIRD PARTY CODE. THOSE SUPPLIERS PROVIDE SUCH CODE WITHOUT WARRANTIES OR CONDITION OF ANY KIND. THIS PARAGRAPH DOES NOT NULLIFY IBM'S WARRANTY OBLIGATIONS UNDER THIS AGREEMENT.

9. Licensee Data and Databases

To assist Licensee in isolating the cause of a problem with the Program, IBM may request that Licensee 1) allow IBM to remotely access Licensee's system or 2) send Licensee information or system data to IBM. However, IBM is not obligated to provide such assistance unless IBM and Licensee enter a separate written agreement under which IBM agrees to provide to Licensee that type of support, which is beyond IBM's warranty obligations in this Agreement. In any event, IBM uses information about errors and problems to improve its products and services, and assist with its provision of related support offerings. For these purposes, IBM may use IBM entities and subcontractors (including in one or more countries other than the one in which Licensee is located), and Licensee authorizes IBM to do so.

Licensee remains responsible for 1) any data and the content of any database Licensee makes available to IBM, 2) the selection and implementation of procedures and controls regarding access, security, encryption, use, and transmission of data (including any personally-identifiable data), and 3) backup and recovery of any database and any stored data. Licensee will not send or provide IBM access to any personally-identifiable information, whether in data or any other form, and will be responsible for reasonable costs and other amounts that IBM may incur relating to any such information mistakenly provided to IBM or the loss or disclosure of such information by IBM, including those arising out of any third party claims.

10. Limitation of Liability

The limitations and exclusions in this Section 10 (Limitation of Liability) apply to the full extent they are not prohibited by applicable law without the possibility of contractual waiver.

10.1 Items for Which IBM May Be Liable

Circumstances may arise where, because of a default on IBM's part or other liability, Licensee is entitled to recover damages from IBM. Regardless of the basis on which Licensee is entitled to claim damages from IBM (including fundamental breach, negligence, misrepresentation, or other contract or tort claim), IBM's entire liability for all claims in the aggregate arising from or related to each Program or otherwise arising under this Agreement will not exceed the amount of any 1) damages for bodily injury (including death) and damage to real property and tangible personal property and 2) other actual direct damages up to the charges (if the Program is subject to fixed term charges, up to twelve months' charges) Licensee paid for the Program that is the subject of the claim.

This limit also applies to any of IBM's Program developers and suppliers. It is the maximum for which IBM and its Program developers and suppliers are collectively responsible.

10.2 Items for Which IBM Is Not Liable

UNDER NO CIRCUMSTANCES IS IBM, ITS PROGRAM DEVELOPERS OR SUPPLIERS LIABLE FOR ANY OF THE FOLLOWING, EVEN IF INFORMED OF THEIR POSSIBILITY:

a. **LOSS OF, OR DAMAGE TO, DATA;**
b. **SPECIAL, INCIDENTAL, EXEMPLARY, OR INDIRECT DAMAGES, OR FOR ANY ECONOMIC CONSEQUENTIAL DAMAGES; OR**
c. **LOST PROFITS, BUSINESS, REVENUE, GOODWILL, OR ANTICIPATED SAVINGS.**

11. Compliance Verification

For purposes of this Section 11 (Compliance Verification), "IPLA Program Terms" means 1) this Agreement and applicable amendments and transaction documents provided by IBM, and 2) IBM software policies that may be found at the IBM Software Policy website (www.ibm.com/softwarepolicies), including but not limited to those policies concerning backup, sub-capacity pricing, and migration.

The rights and obligations set forth in this Section 11 remain in effect during the period the Program is licensed to Licensee, and for two years thereafter.

11.1 Verification Process

Licensee agrees to create, retain, and provide to IBM and its auditors accurate written records, system tool outputs, and other system information sufficient to provide auditable verification that Licensee's use of all Programs is in compliance with the IPLA Program Terms, including, without limitation, all of IBM's applicable licensing and pricing qualification terms. Licensee is responsible for 1) ensuring that it does not exceed its Authorized Use, and 2) remaining in compliance with IPLA Program Terms.

Upon reasonable notice, IBM may verify Licensee's compliance with IPLA Program Terms at all sites and for all environments in which Licensee uses (for any purpose) Programs subject to IPLA Program Terms. Such verification will be conducted in a manner that minimizes disruption to Licensee's business, and may be conducted on Licensee's premises, during normal business hours. IBM may use an independent auditor to assist with such verification, provided IBM has a written confidentiality agreement in place with such auditor.

11.2 Resolution

IBM will notify Licensee in writing if any such verification indicates that Licensee has used any Program in excess of its Authorized Use or is otherwise not in compliance with the IPLA Program Terms. Licensee agrees to promptly pay directly to IBM the charges that IBM specifies in an invoice for 1) any such excess use, 2) support for such excess use for the lesser of the duration of such excess use or two years, and 3) any additional charges and other liabilities determined as a result of such verification.

12. Third Party Notices

The Program may include third party code that IBM, not the third party, licenses to Licensee under this Agreement. Notices, if any, for the third party code ("Third Party Notices") are included for Licensee's information only. These notices can be found in the Program's NOTICES file(s). Information on how to obtain source code for certain third party code can be found in the Third Party Notices. If in the Third Party Notices IBM identifies third party code as "Modifiable Third Party Code," IBM authorizes Licensee to 1) modify the Modifiable Third Party Code and 2) reverse engineer the Program modules that directly interface with the Modifiable Third Party Code provided that it is only for the purpose of debugging Licensee's modifications to such third party code. IBM's service and support obligations, if any, apply only to the unmodified Program.

13. General

a. Nothing in this Agreement affects any statutory rights of consumers that cannot be waived or limited by contract.
b. For Programs IBM provides to Licensee in tangible form, IBM fulfills its shipping and delivery obligations upon the delivery of such Programs to the IBM-designated carrier, unless otherwise agreed to in writing by Licensee and IBM.
c. If any provision of this Agreement is held to be invalid or unenforceable, the remaining provisions of this Agreement remain in full force and effect.
d. Licensee agrees to comply with all applicable export and import laws and regulations, including U.S. embargo and sanctions regulations and prohibitions on export for certain end uses or to certain users.
e. Licensee authorizes International Business Machines Corporation and its subsidiaries (and their successors and assigns, contractors and IBM Business Partners) to store and use Licensee's business contact information wherever they do business, in connection with IBM products and services, or in furtherance of IBM's business relationship with Licensee.
f. Each party will allow the other reasonable opportunity to comply before it claims that the other has not met its obligations under this Agreement. The parties will attempt in good faith to resolve all disputes, disagreements, or claims between the parties relating to this Agreement.
g. Unless otherwise required by applicable law without the possibility of contractual waiver or limitation: 1) neither party will bring a legal action, regardless of form, for any claim arising out of or related to this Agreement more than two years after the cause of action arose; and 2) upon the expiration of such time limit, any such claim and all respective rights related to the claim lapse.
h. Neither Licensee nor IBM is responsible for failure to fulfill any obligations due to causes beyond its control.
i. No right or cause of action for any third party is created by this Agreement, nor is IBM responsible for any third party claims against Licensee, except as permitted in Subsection 10.1 (Items for Which IBM May Be Liable) above for bodily injury (including death) or damage to real or tangible personal property for which IBM is legally liable to that third party.
j. In entering into this Agreement, neither party is relying on any representation not specified in this Agreement, including but not limited to any representation concerning: 1) the performance or function of the Program, other than as expressly warranted in Section 8 (Warranty and Exclusions) above; 2) the experiences or recommendations of other parties; or 3) any results or savings that Licensee may achieve.
k. IBM has signed agreements with certain organizations (called "IBM Business Partners") to promote, market, and support certain Programs. IBM Business Partners remain independent and separate from IBM. IBM is not responsible for the actions or statements of IBM Business Partners or obligations they have to Licensee.
l. The license and intellectual property indemnification terms of Licensee's other agreements with IBM (such as the IBM Customer Agreement) do not apply to Program licenses granted under this Agreement.

14. Geographic Scope and Governing Law

14.1 Governing Law

Both parties agree to the application of the laws of the country in which Licensee obtained the Program license to govern, interpret, and enforce all of Licensee's and IBM's respective rights, duties, and obligations arising from, or relating in any manner to, the subject matter of this Agreement, without regard to conflict of law principles.

The United Nations Convention on Contracts for the International Sale of Goods does not apply.

14.2 Jurisdiction

All rights, duties, and obligations are subject to the courts of the country in which Licensee obtained the Program license.

Part 2 – Country-unique Terms

For licenses granted in the countries specified below, the following terms replace or modify the referenced terms in Part 1. All terms in Part 1 that are not changed by these amendments remain unchanged and in effect. This Part 2 is organized as follows:

- Multiple country amendments to Part 1, Section 14 (Governing Law and Jurisdiction);
- Americas country amendments to other Agreement terms;
- Asia Pacific country amendments to other Agreement terms; and
- Europe, Middle East, and Africa country amendments to other Agreement terms.

Multiple country amendments to Part 1, Section 14 (Governing Law and Jurisdiction)

14.1 Governing Law

The phrase "the laws of the country in which Licensee obtained the Program license" in the first paragraph of 14.1 Governing Law is replaced by the following phrases in the countries below:

AMERICAS

(1) In **Canada**: the laws in the Province of Ontario;

(2) in **Mexico**: the federal laws of the Republic of Mexico;

(3) in **the United States, Anguilla, Antigua/Barbuda, Aruba, British Virgin Islands, Cayman Islands, Dominica, Grenada, Guyana, Saint Kitts and Nevis, Saint Lucia, Saint Maarten,** and **Saint Vincent and the Grenadines**: the laws of the State of New York, United States;

(4) in **Venezuela**: the laws of the Bolivarian Republic of Venezuela;

ASIA PACIFIC

(5) in **Cambodia** and **Laos**: the laws of the State of New York, United States;

(6) in **Australia**: the laws of the State or Territory in which the transaction is performed;

(7) in **Hong Kong SAR** and **Macau SAR**: the laws of Hong Kong Special Administrative Region ("SAR");

(8) in **Taiwan**: the laws of Taiwan;

EUROPE, MIDDLE EAST, AND AFRICA

(9) in **Albania, Armenia, Azerbaijan, Belarus, Bosnia-Herzegovina, Bulgaria, Croatia, Former Yugoslav Republic of Macedonia, Georgia, Hungary, Kazakhstan, Kyrgyzstan, Moldova, Montenegro, Poland, Romania, Russia, Serbia, Slovakia, Tajikistan, Turkmenistan, Ukraine,** and **Uzbekistan**: the laws of Austria;

(10) in **Algeria, Andorra, Benin, Burkina Faso, Cameroon, Cape Verde, Central African Republic, Chad, Comoros, Congo Republic, Djibouti, Democratic Republic of Congo, Equatorial Guinea, French Guiana, French Polynesia, Gabon, Gambia, Guinea, Guinea-Bissau, Ivory Coast, Lebanon, Madagascar, Mali, Mauritania, Mauritius, Mayotte, Morocco, New Caledonia, Niger, Reunion, Senegal, Seychelles, Togo, Tunisia, Vanuatu,** and **Wallis and Futuna**: the laws of France;

(11) in **Estonia, Latvia,** and **Lithuania**: the laws of Finland;

(12) in **Angola, Bahrain, Botswana, Burundi, Egypt, Eritrea, Ethiopia, Ghana, Jordan, Kenya, Kuwait, Liberia, Malawi, Malta, Mozambique, Nigeria, Oman, Pakistan, Qatar, Rwanda, Sao Tome and Principe, Saudi Arabia, Sierra Leone, Somalia, Tanzania, Uganda, United Arab Emirates, the United Kingdom, West Bank/Gaza, Yemen, Zambia,** and **Zimbabwe**: the laws of England; and

(13) in **South Africa, Namibia, Lesotho,** and **Swaziland**: the laws of the Republic of South Africa.

14.2 Jurisdiction

The following paragraph pertains to jurisdiction and replaces Subsection 14.2 (Jurisdiction) as it applies for those countries identified below:

All rights, duties, and obligations are subject to the courts of the country in which Licensee obtained the Program license except that in the countries identified below all disputes arising out of or related to this Agreement, including summary proceedings, will be brought before and subject to the exclusive jurisdiction of the following courts of competent jurisdiction:

AMERICAS

(1) In **Argentina**: the Ordinary Commercial Court of the city of Buenos Aires;

(2) in **Brazil**: the court of Rio de Janeiro, RJ;

(3) in **Chile**: the Civil Courts of Justice of Santiago;

(4) in **Ecuador**: the civil judges of Quito for executory or summary proceedings (as applicable);

(5) in **Mexico**: the courts located in Mexico City, Federal District;

(6) in **Peru**: the judges and tribunals of the judicial district of Lima, Cercado;

(7) in **Uruguay**: the courts of the city of Montevideo;

(8) in **Venezuela**: the courts of the metropolitan area of the city of Caracas;

EUROPE, MIDDLE EAST, AND AFRICA

(9) in **Austria**: the court of law in Vienna, Austria (Inner-City);

(10) in **Algeria, Andorra, Benin, Burkina Faso, Cameroon, Cape Verde, Central African Republic, Chad, Comoros, Congo Republic, Djibouti, Democratic Republic of Congo, Equatorial Guinea, France, French Guiana, French Polynesia, Gabon, Gambia, Guinea, Guinea-Bissau, Ivory Coast, Lebanon, Madagascar, Mali, Mauritania, Mauritius, Mayotte, Monaco, Morocco, New Caledonia, Niger, Reunion, Senegal, Seychelles, Togo, Tunisia, Vanuatu,** and **Wallis and Futuna**: the Commercial Court of Paris;

(11) in **Angola, Bahrain, Botswana, Burundi, Egypt, Eritrea, Ethiopia, Ghana, Jordan, Kenya, Kuwait, Liberia, Malawi, Malta, Mozambique, Nigeria, Oman, Pakistan, Qatar, Rwanda, Sao Tome and Principe, Saudi Arabia, Sierra Leone, Somalia, Tanzania, Uganda, United Arab Emirates, the United Kingdom, West Bank/Gaza, Yemen, Zambia,** and **Zimbabwe**: the English courts;

(12) in **South Africa, Namibia, Lesotho,** and **Swaziland**: the High Court in Johannesburg;

(13) in **Greece**: the competent court of Athens;

(14) in **Israel**: the courts of Tel Aviv-Jaffa;

(15) in **Italy**: the courts of Milan;

(16) in **Portugal**: the courts of Lisbon;

(17) in **Spain**: the courts of Madrid; and

(18) in **Turkey**: the Istanbul Central Courts and Execution Directorates of Istanbul, the Republic of Turkey.

14.3 Arbitration

The following paragraph is added as a new Subsection 14.3 (Arbitration) as it applies for those countries identified below. The provisions of this Subsection 14.3 prevail over those of Subsection 14.2 (Jurisdiction) to the extent permitted by the applicable governing law and rules of procedure:

ASIA PACIFIC

(1) In **Cambodia, India, Laos, Philippines,** and **Vietnam**:

Disputes arising out of or in connection with this Agreement will be finally settled by arbitration which will be held in Singapore in accordance with the Arbitration Rules of Singapore International Arbitration Center ("SIAC Rules") then in effect. The arbitration award will be final and binding for the parties without appeal and will be in writing and set forth the findings of fact and the conclusions of law.

The number of arbitrators will be three, with each side to the dispute being entitled to appoint one arbitrator. The two arbitrators appointed by the parties will appoint a third arbitrator who will act as chairman of the proceedings. Vacancies in the post of chairman will be filled by the president of the SIAC. Other vacancies will be filled by the respective nominating party. Proceedings will continue from the stage they were at when the vacancy occurred.

If one of the parties refuses or otherwise fails to appoint an arbitrator within 30 days of the date the other party appoints its, the first appointed arbitrator will be the sole arbitrator, provided that the arbitrator was validly and properly appointed.

All proceedings will be conducted, including all documents presented in such proceedings, in the English language. The English language version of this Agreement prevails over any other language version.

(2) In **the People's Republic of China**:

In case no settlement can be reached, the disputes will be submitted to China International Economic and Trade Arbitration Commission for arbitration according to the then effective rules of the said Arbitration Commission. The arbitration will take place in Beijing and be conducted in Chinese. The arbitration award will be final and binding on both parties. During the course of arbitration, this agreement will continue to be performed except for the part which the parties are disputing and which is undergoing arbitration.

(3) In **Indonesia**:

Each party will allow the other reasonable opportunity to comply before it claims that the other has not met its obligations under this Agreement. The parties will attempt in good faith to resolve all disputes, disagreements, or claims between the parties relating to this Agreement. Unless otherwise required by applicable law without the possibility of contractual waiver or limitation, i) neither party will bring a legal action, regardless of form, arising out of or related to this Agreement or any transaction under it more than two years after the cause of action arose; and ii) after such time limit, any legal action arising out of this Agreement or any transaction under it and all respective rights related to any such action lapse.

Disputes arising out of or in connection with this Agreement shall be finally settled by arbitration that shall be held in Jakarta, Indonesia in accordance with the rules of Board of the Indonesian National Board of Arbitration (Badan Arbitrase Nasional Indonesia or "BANI") then in effect. The arbitration award shall be final and binding for the parties without appeal and shall be in writing and set forth the findings of fact and the conclusions of law.

The number of arbitrators shall be three, with each side to the dispute being entitled to appoint one arbitrator. The two arbitrators appointed by the parties shall appoint a third

arbitrator who shall act as chairman of the proceedings. Vacancies in the post of chairman shall be filled by the chairman of the BANI. Other vacancies shall be filled by the respective nominating party. Proceedings shall continue from the stage they were at when the vacancy occurred.

If one of the parties refuses or otherwise fails to appoint an arbitrator within 30 days of the date the other party appoints its, the first appointed arbitrator shall be the sole arbitrator, provided that the arbitrator was validly and properly appointed.

All proceedings shall be conducted, including all documents presented in such proceedings, in the English and/or Indonesian language.

EUROPE, MIDDLE EAST, AND AFRICA

(4) In **Albania, Armenia, Azerbaijan, Belarus, Bosnia-Herzegovina, Bulgaria, Croatia, Former Yugoslav Republic of Macedonia, Georgia, Hungary, Kazakhstan, Kyrgyzstan, Moldova, Montenegro, Poland, Romania, Russia, Serbia, Slovakia, Tajikistan, Turkmenistan, Ukraine,** and **Uzbekistan**:

All disputes arising out of this Agreement or related to its violation, termination or nullity will be finally settled under the Rules of Arbitration and Conciliation of the International Arbitral Center of the Federal Economic Chamber in Vienna (Vienna Rules) by three arbitrators appointed in accordance with these rules. The arbitration will be held in Vienna, Austria, and the official language of the proceedings will be English. The decision of the arbitrators will be final and binding upon both parties. Therefore, pursuant to paragraph 598 (2) of the Austrian Code of Civil Procedure, the parties expressly waive the application of paragraph 595 (1) figure 7 of the Code. IBM may, however, institute proceedings in a competent court in the country of installation.

(5) In **Estonia, Latvia,** and **Lithuania**:

All disputes arising in connection with this Agreement will be finally settled in arbitration that will be held in Helsinki, Finland in accordance with the arbitration laws of Finland then in effect. Each party will appoint one arbitrator. The arbitrators will then jointly appoint the chairman. If arbitrators cannot agree on the chairman, then the Central Chamber of Commerce in Helsinki will appoint the chairman.

AMERICAS COUNTRY AMENDMENTS

CANADA

10.1 Items for Which IBM May be Liable

The following replaces Item 1 in the first paragraph of this Subsection 10.1 (Items for Which IBM May be Liable):

1) damages for bodily injury (including death) and physical harm to real property and tangible personal property caused by IBM's negligence; and

13. General

The following replaces Item 13.d:

d. Licensee agrees to comply with all applicable export and import laws and regulations, including those of that apply to goods of United States origin and that prohibit or limit export for certain uses or to certain users.

The following replaces Item 13.i:

i. No right or cause of action for any third party is created by this Agreement or any transaction under it, nor is IBM responsible for any third party claims against Licensee except as permitted by the Limitation of Liability section above for bodily injury

(including death) or physical harm to real or tangible personal property caused by IBM's negligence for which IBM is legally liable to that third party.

The following is added as Item 13.m:

m. For purposes of this Item 13.m, "Personal Data" refers to information relating to an identified or identifiable individual made available by one of the parties, its personnel or any other individual to the other in connection with this Agreement. The following provisions apply in the event that one party makes Personal Data available to the other:

(1) General

(a) Each party is responsible for complying with any obligations applying to it under applicable Canadian data privacy laws and regulations ("Laws").

(b) Neither party will request Personal Data beyond what is necessary to fulfill the purpose(s) for which it is requested. The purpose(s) for requesting Personal Data must be reasonable. Each party will agree in advance as to the type of Personal Data that is required to be made available.

(2) Security Safeguards

(a) Each party acknowledges that it is solely responsible for determining and communicating to the other the appropriate technological, physical and organizational security measures required to protect Personal Data.

(b) Each party will ensure that Personal Data is protected in accordance with the security safeguards communicated and agreed to by the other.

(c) Each party will ensure that any third party to whom Personal Data is transferred is bound by the applicable terms of this section.

(d) Additional or different services required to comply with the Laws will be deemed a request for new services.

(3) Use

Each party agrees that Personal Data will only be used, accessed, managed, transferred, disclosed to third parties or otherwise processed to fulfill the purpose(s) for which it was made available.

(4) Access Requests

(a) Each party agrees to reasonably cooperate with the other in connection with requests to access or amend Personal Data.

(b) Each party agrees to reimburse the other for any reasonable charges incurred in providing each other assistance.

(c) Each party agrees to amend Personal Data only upon receiving instructions to do so from the other party or its personnel.

(5) Retention

Each party will promptly return to the other or destroy all Personal Data that is no longer necessary to fulfill the purpose(s) for which it was made available, unless otherwise instructed by the other or its personnel or required by law.

(6) Public Bodies Who Are Subject to Public Sector Privacy Legislation

For Licensees who are public bodies subject to public sector privacy legislation, this Item 13.m applies only to Personal Data made available to Licensee in connection with this Agreement, and the obligations in this section apply only to Licensee,

except that: 1) section (2)(a) applies only to IBM; 2) sections (1)(a) and (4)(a) apply to both parties; and 3) section (4)(b) and the last sentence in (1)(b) do not apply.

PERU

10. Limitation of Liability

The following is added to the end of this Section 10 (Limitation of Liability):

Except as expressly required by law without the possibility of contractual waiver, Licensee and IBM intend that the limitation of liability in this Limitation of Liability section applies to damages caused by all types of claims and causes of action. If any limitation on or exclusion from liability in this section is held by a court of competent jurisdiction to be unenforceable with respect to a particular claim or cause of action, the parties intend that it nonetheless apply to the maximum extent permitted by applicable law to all other claims and causes of action.

10.1 Items for Which IBM May be Liable

The following is added at the end of this Subsection 10.1:

In accordance with Article 1328 of the Peruvian Civil Code, the limitations and exclusions specified in this section will not apply to damages caused by IBM's willful misconduct ("dolo") or gross negligence ("culpa inexcusable").

UNITED STATES OF AMERICA

5. Taxes

The following is added at the end of this Section 5 (Taxes)

For Programs delivered electronically in the United States for which Licensee claims a state sales and use tax exemption, Licensee agrees not to receive any tangible personal property (e.g., media and publications) associated with the electronic program.

Licensee agrees to be responsible for any sales and use tax liabilities that may arise as a result of Licensee's subsequent redistribution of Programs after delivery by IBM.

13. General

The following is added to Section 13 as Item 13.m:

U.S. Government Users Restricted Rights – Use, duplication or disclosure is restricted by the GSA IT Schedule 70 Contract with the IBM Corporation.

The following is added to Item 13.f:

Each party waives any right to a jury trial in any proceeding arising out of or related to this Agreement.

ASIA PACIFIC COUNTRY AMENDMENTS

AUSTRALIA

5. Taxes

The following sentences replace the first two sentences of Section 5 (Taxes):

If any government or authority imposes a duty, tax (other than income tax), levy, or fee, on this Agreement or on the Program itself, that is not otherwise provided for in the amount payable, Licensee agrees to pay it when IBM invoices Licensee. If the rate of GST changes, IBM may adjust the charge or other amount payable to take into account that change from the date the change becomes effective.

8.1 Limited Warranty

The following is added to Subsection 8.1 (Limited Warranty):

The warranties specified this Section are in addition to any rights Licensee may have under the Competition and Consumer Act 2010 or other legislation and are only limited to the extent permitted by the applicable legislation.

10.1 Items for Which IBM May be Liable

The following is added to Subsection 10.1 (Items for Which IBM May be Liable):

Where IBM is in breach of a condition or warranty implied by the Competition and Consumer Act 2010, IBM's liability is limited to the repair or replacement of the goods, or the supply of equivalent goods. Where that condition or warranty relates to right to sell, quiet possession or clear title, or the goods are of a kind ordinarily obtained for personal, domestic or household use or consumption, then none of the limitations in this paragraph apply.

HONG KONG SAR, MACAU SAR, AND **TAIWAN**

As applies to licenses obtained in Taiwan and the special administrative regions, phrases throughout this Agreement containing the word "country" (for example, "the country in which the original Licensee was granted the license" and "the country in which Licensee obtained the Program license") are replaced with the following:

(1) In **Hong Kong SAR**: "Hong Kong SAR"

(2) In **Macau SAR**: "Macau SAR" except in the Governing Law clause (Section 14.1)

(3) In **Taiwan**: "Taiwan."

INDIA

10.1 Items for Which IBM May be Liable

The following replaces the terms of Items 1 and 2 of the first paragraph:

1) liability for bodily injury (including death) or damage to real property and tangible personal property will be limited to that caused by IBM's negligence; and 2) as to any other actual damage arising in any situation involving nonperformance by IBM pursuant to, or in any way related to the subject of this Agreement, IBM's liability will be limited to the charge paid by Licensee for the individual Program that is the subject of the claim.

13. General

The following replaces the terms of Item 13.g:

If no suit or other legal action is brought, within three years after the cause of action arose, in respect of any claim that either party may have against the other, the rights of the concerned party in respect of such claim will be forfeited and the other party will stand released from its obligations in respect of such claim.

INDONESIA

3.3 Term and Termination

The following is added to the last paragraph:

Both parties waive the provision of article 1266 of the Indonesian Civil Code, to the extent the article provision requires such court decree for the termination of an agreement creating mutual obligations.

JAPAN

13. General

The following is inserted after Item 13.f:

Any doubts concerning this Agreement will be initially resolved between us in good faith and in accordance with the principle of mutual trust.

MALAYSIA

10.2 Items for Which IBM Is not Liable

The word "SPECIAL" in Item 10.2b is deleted.

NEW ZEALAND

8.1 Limited Warranty

The following is added:

The warranties specified in this Section are in addition to any rights Licensee may have under the Consumer Guarantees Act 1993 or other legislation which cannot be excluded or limited. The Consumer Guarantees Act 1993 will not apply in respect of any goods which IBM provides, if Licensee requires the goods for the purposes of a business as defined in that Act.

10. Limitation of Liability

The following is added:

Where Programs are not obtained for the purposes of a business as defined in the Consumer Guarantees Act 1993, the limitations in this Section are subject to the limitations in that Act.

PEOPLE'S REPUBLIC OF CHINA

4. Charges

The following is added:

All banking charges incurred in the People's Republic of China will be borne by Licensee and those incurred outside the People's Republic of China will be borne by IBM.

PHILIPPINES

10.2 Items for Which IBM Is not Liable

The following replaces the terms of Item 10.2b:

b. special (including nominal and exemplary damages), moral, incidental, or indirect damages or for any economic consequential damages; or

SINGAPORE

10.2 Items for Which IBM Is not Liable

The words "SPECIAL" and "ECONOMIC" are deleted from Item 10.2b.

13. General

The following replaces the terms of Item 13.i:

Subject to the rights provided to IBM's suppliers and Program developers as provided in Section 10 above (Limitation of Liability), a person who is not a party to this Agreement will have no right under the Contracts (Right of Third Parties) Act to enforce any of its terms.

TAIWAN

8.1 Limited Warranty

The last paragraph is deleted.

10.1 Items for Which IBM May Be Liable

The following sentences are deleted:

This limit also applies to any of IBM's subcontractors and Program developers. It is the maximum for which IBM and its subcontractors and Program developers are collectively responsible.

EUROPE, MIDDLE EAST, AFRICA (EMEA) COUNTRY AMENDMENTS

EUROPEAN UNION MEMBER STATES

8. Warranty and Exclusions

The following is added to Section 8 (Warranty and Exclusion):

In the European Union ("EU"), consumers have legal rights under applicable national legislation governing the sale of consumer goods. Such rights are not affected by the provisions set out in this Section 8 (Warranty and Exclusions). The territorial scope of the Limited Warranty is worldwide.

EU MEMBER STATES AND THE COUNTRIES IDENTIFIED BELOW

Iceland, Liechtenstein, Norway, Switzerland, Turkey, and any other European country that has enacted local data privacy or protection legislation similar to the EU model.

13. General

The following replaces Item 13.e:

(1) **Definitions** – For the purposes of this Item 13.e, the following additional definitions apply:

(a) **Business Contact Information** – business-related contact information disclosed by Licensee to IBM, including names, job titles, business addresses, telephone numbers and email addresses of Licensee's employees and contractors. For Austria, Italy and Switzerland, Business Contact Information also includes information about Licensee and its contractors as legal entities (for example, Licensee's revenue data and other transactional information)

(b) **Business Contact Personnel** – Licensee employees and contractors to whom the Business Contact Information relates.

(c) **Data Protection Authority** – the authority established by the Data Protection and Electronic Communications Legislation in the applicable country or, for non-EU countries, the authority responsible for supervising the protection of personal data in that country, or (for any of the foregoing) any duly appointed successor entity thereto.

(d) **Data Protection & Electronic Communications Legislation** – (i) the applicable local legislation and regulations in force implementing the requirements of EU Directive 95/46/EC (on the protection of individuals with regard to the processing of personal data and on the free movement of such data) and of EU Directive 2002/58/EC (concerning the processing of personal data and the protection of privacy in the electronic communications sector); or (ii) for non-EU countries, the legislation and/or regulations passed in the applicable country relating to the protection of

personal data and the regulation of electronic communications involving personal data, including (for any of the foregoing) any statutory replacement or modification thereof.

(e) **IBM Group** – International Business Machines Corporation of Armonk, New York, USA, its subsidiaries, and their respective Business Partners and subcontractors.

(2) Licensee authorizes IBM:

(a) to process and use Business Contact Information within IBM Group in support of Licensee including the provision of support services, and for the purpose of furthering the business relationship between Licensee and IBM Group, including, without limitation, contacting Business Contact Personnel (by email or otherwise) and marketing IBM Group products and services (the "Specified Purpose"); and

(b) to disclose Business Contact Information to other members of IBM Group in pursuit of the Specified Purpose only.

(3) IBM agrees that all Business Contact Information will be processed in accordance with the Data Protection & Electronic Communications Legislation and will be used only for the Specified Purpose.

(4) To the extent required by the Data Protection & Electronic Communications Legislation, Licensee represents that (a) it has obtained (or will obtain) any consents from (and has issued (or will issue) any notices to) the Business Contact Personnel as are necessary in order to enable IBM Group to process and use the Business Contact Information for the Specified Purpose.

(5) Licensee authorizes IBM to transfer Business Contact Information outside the European Economic Area, provided that the transfer is made on contractual terms approved by the Data Protection Authority or the transfer is otherwise permitted under the Data Protection & Electronic Communications Legislation.

AUSTRIA

8.2 Exclusions

The following is deleted from the first paragraph:

MERCHANTABILITY, SATISFACTORY QUALITY

10. Limitation of Liability

The following is added:

The following limitations and exclusions of IBM's liability do not apply for damages caused by gross negligence or willful misconduct.

10.1 Items for Which IBM May Be Liable

The following replaces the first sentence in the first paragraph:

Circumstances may arise where, because of a default by IBM in the performance of its obligations under this Agreement or other liability, Licensee is entitled to recover damages from IBM.

In the second sentence of the first paragraph, delete entirely the parenthetical phrase:

"(including fundamental breach, negligence, misrepresentation, or other contract or tort claim)".

10.2 Items for Which IBM Is Not Liable

The following replaces Item 10.2b:

b. indirect damages or consequential damages; or

BELGIUM, FRANCE, ITALY, AND LUXEMBOURG

10. Limitation of Liability

The following replaces the terms of Section 10 (Limitation of Liability) in its entirety:

Except as otherwise provided by mandatory law:

10.1 Items for Which IBM May Be Liable

IBM's entire liability for all claims in the aggregate for any damages and losses that may arise as a consequence of the fulfillment of its obligations under or in connection with this Agreement or due to any other cause related to this Agreement is limited to the compensation of only those damages and losses proved and actually arising as an immediate and direct consequence of the non-fulfillment of such obligations (if IBM is at fault) or of such cause, for a maximum amount equal to the charges (if the Program is subject to fixed term charges, up to twelve months' charges) Licensee paid for the Program that has caused the damages.

The above limitation will not apply to damages for bodily injuries (including death) and damages to real property and tangible personal property for which IBM is legally liable.

10.2 Items for Which IBM Is Not Liable

UNDER NO CIRCUMSTANCES IS IBM OR ANY OF ITS PROGRAM DEVELOPERS LIABLE FOR ANY OF THE FOLLOWING, EVEN IF INFORMED OF THEIR POSSIBILITY: 1) LOSS OF, OR DAMAGE TO, DATA; 2) INCIDENTAL, EXEMPLARY OR INDIRECT DAMAGES, OR FOR ANY ECONOMIC CONSEQUENTIAL DAMAGES; AND / OR 3) LOST PROFITS, BUSINESS, REVENUE, GOODWILL, OR ANTICIPATED SAVINGS, EVEN IF THEY ARISE AS AN IMMEDIATE CONSEQUENCE OF THE EVENT THAT GENERATED THE DAMAGES.

10.3 Suppliers and Program Developers

The limitation and exclusion of liability herein agreed applies not only to the activities performed by IBM but also to the activities performed by its suppliers and Program developers, and represents the maximum amount for which IBM as well as its suppliers and Program developers are collectively responsible.

GERMANY

8.1 Limited Warranty

The following is inserted at the beginning of Section 8.1:

The Warranty Period is twelve months from the date of delivery of the Program to the original Licensee.

8.2 Exclusions

Section 8.2 is deleted in its entirety and replaced with the following:

Section 8.1 defines IBM's entire warranty obligations to Licensee except as otherwise required by applicable statutory law.

10. Limitation of Liability

The following replaces the Limitation of Liability section in its entirety:

a. IBM will be liable without limit for 1) loss or damage caused by a breach of an express guarantee; 2) damages or losses resulting in bodily injury (including death); and 3) damages caused intentionally or by gross negligence.

b. In the event of loss, damage and frustrated expenditures caused by slight negligence or in breach of essential contractual obligations, IBM will be liable, regardless of the basis on which Licensee is entitled to claim damages from IBM (including fundamental breach, negligence, misrepresentation, or other contract or tort claim), per claim only up to the greater of 500,000 euro or the charges (if the Program is subject to fixed term charges, up to 12 months' charges) Licensee paid for the Program that caused the loss or damage. A number of defaults which together result in, or contribute to, substantially the same loss or damage will be treated as one default.

c. In the event of loss, damage and frustrated expenditures caused by slight negligence, IBM will not be liable for indirect or consequential damages, even if IBM was informed about the possibility of such loss or damage.

d. In case of delay on IBM's part: 1) IBM will pay to Licensee an amount not exceeding the loss or damage caused by IBM's delay and 2) IBM will be liable only in respect of the resulting damages that Licensee suffers, subject to the provisions of Items a and b above.

13. General

The following replaces the provisions of 13.g:

Any claims resulting from this Agreement are subject to a limitation period of three years, except as stated in Section 8.1 (Limited Warranty) of this Agreement.

The following replaces the provisions of 13.i:

No right or cause of action for any third party is created by this Agreement, nor is IBM responsible for any third party claims against Licensee, except (to the extent permitted in Section 10 (Limitation of Liability)) for: i) bodily injury (including death); or ii) damage to real or tangible personal property for which (in either case) IBM is legally liable to that third party.

IRELAND

8.2 Exclusions

The following paragraph is added:

Except as expressly provided in these terms and conditions, or Section 12 of the Sale of Goods Act 1893 as amended by the Sale of Goods and Supply of Services Act, 1980 (the "1980 Act"), all conditions or warranties (express or implied, statutory or otherwise) are hereby excluded including, without limitation, any warranties implied by the Sale of Goods Act 1893 as amended by the 1980 Act (including, for the avoidance of doubt, Section 39 of the 1980 Act).

IRELAND AND UNITED KINGDOM

2. Agreement Structure

The following sentence is added:

Nothing in this paragraph shall have the effect of excluding or limiting liability for fraud.

10.1 Items for Which IBM May Be Liable

The following replaces the first paragraph of the Subsection:

For the purposes of this section, a "Default" means any act, statement, omission or negligence on the part of IBM in connection with, or in relation to, the subject matter of an Agreement in respect of which IBM is legally liable to Licensee, whether in contract or in tort. A number of Defaults which together result in, or contribute to, substantially the same loss or damage will be treated as one Default.

Circumstances may arise where, because of a Default by IBM in the performance of its obligations under this Agreement or other liability, Licensee is entitled to recover damages from IBM. Regardless of the basis on which Licensee is entitled to claim damages from IBM and except as expressly required by law without the possibility of contractual waiver, IBM's entire liability for any one Default will not exceed the amount of any direct damages, to the extent actually suffered by Licensee as an immediate and direct consequence of the default, up to the greater of (1) 500,000 euro (or the equivalent in local currency) or (2) 125% of the charges (if the Program is subject to fixed term charges, up to 12 months' charges) for the Program that is the subject of the claim. Notwithstanding the foregoing, the amount of any damages for bodily injury (including death) and damage to real property and tangible personal property for which IBM is legally liable is not subject to such limitation.

10.2 Items for Which IBM is Not Liable

The following replaces Items 10.2b and 10.2c:

b. special, incidental, exemplary, or indirect damages or consequential damages; or

c. wasted management time or lost profits, business, revenue, goodwill, or anticipated savings.

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IBM License Information document

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LICENSE INFORMATION

The Programs listed below are licensed under the following terms and conditions in addition to those of the IBM International Program License Agreement (IBM form number Z125-3301-14).

Program Name: IBM Cognos Business Intelligence for Non-Production Environment 10.2.1
Program Number: 5724-W12

Program Name: IBM Cognos Business Intelligence Administrator 10.2.1
Program Number: 5724-W12

Program Name: IBM Cognos Business Intelligence Web Administrator 10.2.1
Program Number: 5724-W12

Program Name: IBM Cognos Business Intelligence Professional 10.2.1
Program Number: 5724-W12

Program Name: IBM Cognos Business Intelligence Professional Limited Use 10.2.1
Program Number: 5724-W12

Program Name: IBM Cognos Business Intelligence Professional Author 10.2.1
Program Number: 5724-W12

Program Name: IBM Cognos Business Intelligence Professional Author Limited Use 10.2.1
Program Number: 5724-W12

Program Name: IBM Cognos Business Intelligence Advanced Business Author 10.2.1
Program Number: 5724-W12

Program Name: IBM Cognos Business Intelligence Advanced Business Author Limited Use 10.2.1
Program Number: 5724-W12

Program Name: IBM Cognos Business Intelligence Business Analyst 10.2.1
Program Number: 5724-W12

Program Name: IBM Cognos Business Intelligence Business Analyst Limited Use 10.2.1
Program Number: 5724-W12

Program Name: IBM Cognos Business Intelligence Business Author 10.2.1
Program Number: 5724-W12

Program Name: IBM Cognos Business Intelligence Business Author Limited Use 10.2.1
Program Number: 5724-W12

Program Name: IBM Cognos Business Intelligence Business Manager 10.2.1
Program Number: 5724-W12

Program Name: IBM Cognos Business Intelligence Business Manager Limited Use 10.2.1
Program Number: 5724-W12

Program Name: IBM Cognos Business Intelligence Consumer 10.2.1
Program Number: 5724-W12

Program Name: IBM Cognos Business Intelligence Consumer Limited Use 10.2.1
Program Number: 5724-W12

Program Name: IBM Cognos Business Intelligence Recipient 10.2.1
Program Number: 5724-W12

Program Name: IBM Cognos Business Intelligence Recipient Limited Use 10.2.1
Program Number: 5724-W12

Program Name: IBM Cognos Business Intelligence Remote Recipient 10.2.1
Program Number: 5724-W12

Program Name: IBM Cognos Business Intelligence Remote Recipient Limited Use 10.2.1
Program Number: 5724-W12

Program Name: IBM Cognos Active Report Recipient 10.2.1
Program Number: 5724-W12

Program Name: IBM Cognos Active Report Limited Use Recipient 10.2.1
Program Number: 5724-W12

Program Name: IBM Cognos Business Intelligence Analysis Studio Add-on 10.2.1
Program Number: 5724-W12

Program Name: IBM Cognos Business Intelligence Analysis Studio Add-on Limited Use 10.2.1
Program Number: 5724-W12

Program Name: IBM Cognos Business Intelligence Event Studio Add-on 10.2.1
Program Number: 5724-W12

Program Name: IBM Cognos Business Intelligence Event Studio Add-on Limited Use 10.2.1
Program Number: 5724-W12

Program Name: IBM Cognos Business Intelligence Query Studio Add-on 10.2.1
Program Number: 5724-W12

Program Name: IBM Cognos Business Intelligence Query Studio Add-on Limited Use 10.2.1
Program Number: 5724-W12

Program Name: IBM Cognos Business Intelligence Report Studio Express Author Mode Add-on 10.2.1
Program Number: 5724-W12

Program Name: IBM Cognos Business Intelligence Report Studio Express Author Mode Add-on Limited Use 10.2.1
Program Number: 5724-W12

Program Name: IBM Cognos Business Intelligence Enhanced Consumer 10.2.1
Program Number: 5724-W12

Program Name: IBM Cognos Business Intelligence Enhanced Consumer Limited Use 10.2.1
Program Number: 5724-W12

Program Name: IBM Cognos Collaboration 10.2.1
Program Number: 5724-W12

Program Name: IBM Cognos Business Intelligence Architect 10.2.1
Program Number: 5724-W12

Program Name: IBM Cognos Business Intelligence User 10.2.1
Program Number: 5724-W12

Program Name: IBM Cognos Business Intelligence User for Non-Production Environment 10.2.1
Program Number: 5724-W12

As described in the International Program License Agreement ("IPLA") and this License Information, IBM grants Licensee a limited right to use the Program. This right is limited to the level of Authorized Use, such as a Processor Value Unit ("PVU"), a Value Unit ("VU"), or other specified level of use, paid for by Licensee as evidenced in the Proof of Entitlement. Licensee's use may also be limited to a specified machine, or only as a Supporting Program, or subject to other restrictions. As Licensee has not paid for all of the economic value of the Program, no other use is permitted without the payment of additional fees. In addition, as stated in the IPLA, Licensee is not authorized to use the Program to provide commercial IT services to any third party, to provide commercial hosting or timesharing, or to sublicense, rent, or lease the Program unless expressly provided for in the applicable agreements under which Licensee obtains authorizations to use the Program. Additional rights may be available to Licensee subject to the payment of additional fees or under different or supplementary terms. IBM reserves the right to determine whether to make such additional rights available to Licensee.

Program's specifications can be found in the collective Description and Technical Information sections of the Program's Announcement Letters.

Supporting Programs

The Program is licensed as a multi-product package and includes the Supporting Programs identified below. Licensee is authorized to install and use such Supporting Programs only to support Licensee's use of the Principal Program under this Agreement and within the limits of the Proofs of Entitlement for the Program (unless broader rights are provided elsewhere in this License Information document). The phrase "to support Licensee's use" would include only those uses that are necessary or otherwise directly related to a licensed use of the Principal Program or another Supporting Program. The Supporting Programs may not be used for any other purpose. Licensee is not authorized to transfer or remarket the Supporting Programs separate from the Principal Program. A Supporting Program may be accompanied by license terms, and those terms, if any, apply to Licensee's use of that Supporting Program. In the event of conflict, the terms in this License Information document supersede the Supporting Program's terms. When Licensee's right to use the Program expires or terminates, Licensee must discontinue use, destroy or promptly return all copies of the Supporting Programs to the party from whom Licensee acquired the Program. If Licensee downloaded the Supporting Programs, Licensee should contact the party from whom Licensee acquired the Program. If Licensee wishes to license the Supporting Programs for any use beyond the limits set forth above, please contact an IBM Sales Representative or the party from whom Licensee acquired the Program to obtain the appropriate license.

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IBM Cognos Business Intelligence Samples
IBM Cognos Business Intelligence Transformer
IBM Cognos for Microsoft Office

IBM Cognos Framework Manager
IBM Cognos Lifecycle Manager
IBM Cognos Cube Designer
IBM Cognos Metrics Manager
IBM Cognos Mobile
IBM Cognos Supplementary Languages Documentation
IBM Cognos Software Development Kit
IBM Cognos Insight
IBM Cognos Connection Installer for IBM Cognos Insight
IBM Cognos TM1 Package Connector
IBM Cognos Dynamic Query Analyzer
IBM Connections
IBM DB2 Workgroup Server Edition
IBM Tivoli Directory Integrator Identity Edition
IBM WebSphere Application Server

Non-Production Limitation

If the Program is designated as "Non-Production", the Program can only be deployed as part of the Licensee's internal development and test environment for internal non-production activities, including but not limited to testing, performance tuning, fault diagnosis, internal benchmarking, staging, quality assurance activity and/or developing internally used additions or extensions to the Program using published application programming interfaces. Licensee is not authorized to use any part of the Program for any other purposes without acquiring the appropriate production entitlements.

Source Components and Sample Materials

The Program may include some components in source code form ("Source Components") and other materials identified as Sample Materials. Licensee may copy and modify Source Components and Sample Materials for internal use only provided such use is within the limits of the license rights under this Agreement, provided however that Licensee may not alter or delete any copyright information or notices contained in the Source Components or Sample Materials. IBM provides the Source Components and Sample Materials without obligation of support and "AS IS", WITH NO WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING THE WARRANTY OF TITLE, NON-INFRINGEMENT OR NON-INTERFERENCE AND THE IMPLIED WARRANTIES AND CONDITIONS OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

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This Program may contain cryptography. Transfer to, or use by, users of the Program may be prohibited or subject to export or import laws, regulations or policies, including those of the United States Export Administration Regulations. Licensee assumes all responsibility for complying with all applicable laws, regulations, and policies regarding the export, import, or use of this Program, including but not limited to, U.S. restrictions on exports or reexports. To obtain the export classification of this Program refer to: https://www.ibm.com/products/exporting/.

Restrictions on Use for the Benefit of a Third Party

Licensee may not use the Program or any component thereof to provide service bureau, hosting services, or any sort of commercial information technology services to third parties, or transfer the Program to a third party, unless otherwise agreed to in writing by IBM.

Authorized User

Authorized User is a unit of measure by which the Program can be licensed. An Authorized User is a unique person who is given access to the Program. The Program may be installed on any number of computers or servers and each Authorized User may have simultaneous access to any number of instances of the Program at one time. Licensee must obtain separate, dedicated entitlements for each Authorized User given access to the Program in any manner directly or indirectly (for example: via a multiplexing program, device, or application server) through any means. An entitlement for an Authorized User is unique to that Authorized User and may not be shared, nor may it be reassigned other than for the permanent transfer of the Authorized User entitlement to another person.

Processor Value Unit (PVU)

Processor Value Unit (PVU) is a unit of measure by which the Program can be licensed. The number of PVU entitlements required is based on the processor technology (defined within the PVU Table by Processor Vendor, Brand, Type and Model Number at http://www.ibm.com/software/lotus/passportadvantage/pvu_licensing_for_customers.html) and the number of processors made available to the Program. IBM continues to define a processor, for the purpose of PVU-based licensing, to be each processor core on a chip. A dual-core processor chip, for example, has two processor cores.

Licensee can deploy the Program using either Full Capacity licensing or Virtualization Capacity (Sub-Capacity) licensing according to the Passport Advantage Sub-Capacity Licensing Terms (see webpage below). If using Full Capacity licensing, Licensee must obtain PVU entitlements sufficient to cover all activated processor cores* in the physical hardware environment made available to or managed by the Program, except for those servers from which the Program has been permanently removed. If using Virtualization Capacity licensing, Licensee must obtain entitlements sufficient to cover all activated processor cores made available to or managed by the Program, as defined according to the Virtualization Capacity License Counting Rules at http://www.ibm.com/software/lotus/passportadvantage/Counting_Software_licenses_using_specific_virtualization_technologies.html.

* An Activated processor core is a processor core that is available for use in a physical or virtual server, regardless of whether the capacity of the processor core can be or is limited through virtualization technologies, operating system commands, BIOS settings, or similar restrictions.

General Charge Terms

Processor (not available to new Licensees or under the IBM International Passport Advantage or Passport Advantage Express Agreements)

Processor is a unit of measure by which the Program can be licensed. Processor (commonly called a processor core or CPU) is a functional unit within a computing device that interprets and executes instructions. A processor consists of at least an instruction control unit and one or more arithmetic or logic units. With multi-core technology, each core is considered a processor. With full capacity licensing, an entitlement must be acquired for all activated processor cores available for use on the server.

Program-unique Terms

Each person who is provided Active Report outputs or personalized reports is a user of the Program and must be covered by an entitlement to an appropriate user role.

User Roles

Architects are not authorized to use any of the following components or functions of the Program or Supporting Program:
- IBM Cognos Analysis Studio
- IBM Cognos Business Intelligence Transformer
- IBM Cognos Metric Designer
- IBM Cognos Metric Studio
- IBM Cognos Query Studio

Users are not authorized to use any of the following components or functions of the Program or Supporting Program:
- IBM Cognos Analysis Studio
- IBM Cognos Business Intelligence Transformer
- IBM Cognos Metric Designer
- IBM Cognos Metric Studio
- IBM Cognos Query Studio
- IBM Cognos Administration
- IBM Cognos Framework Manager
- IBM Cognos Cube Designer
- IBM Cognos Software Development Kit
- IBM Cognos Dynamic Query Analyzer

Web Administrators are not authorized to use any of the following components or functions of the Program or Supporting Program:

- IBM Cognos Analysis Studio
- IBM Cognos Workspace
- IBM Cognos Workspace Advanced
- IBM Cognos Business Intelligence Transformer
- IBM Cognos Event Studio
- IBM Cognos for Microsoft Office
- IBM Cognos Framework Manager
- IBM Cognos Cube Designer
- IBM Cognos Metrics Designer
- IBM Cognos Metrics Studio
- IBM Cognos Mobile
- IBM Cognos Query Studio
- IBM Cognos Report Studio
- IBM Cognos Insight
- IBM Cognos Software Development Kit
- IBM Cognos Dynamic Query Analyzer
- IBM Connections
- Receive reports

Professionals are not authorized to use any of the following components or functions of the Program or Supporting Program:

- IBM Cognos Administration
- IBM Cognos Framework Manager
- IBM Cognos Cube Designer
- IBM Cognos Software Development Kit
- IBM Cognos Dynamic Query Analyzer

Professional Authors are not authorized to use any of the following components or functions of the Program or Supporting Program:

- IBM Cognos Administration
- IBM Cognos Analysis Studio
- IBM Cognos Business Intelligence Transformer
- IBM Cognos Event Studio
- IBM Cognos Framework Manager
- IBM Cognos Cube Designer
- IBM Cognos Metric Designer
- IBM Cognos Metric Studio
- IBM Cognos Software Development Kit

- IBM Cognos Software Development Kit
- IBM Cognos Dynamic Query Analyzer

Advanced Business Authors are not authorized to use any of the following components or functions of the Program or Supporting Program:

- IBM Cognos Administration
- IBM Cognos Business Intelligence Transformer
- IBM Cognos Event Studio
- IBM Cognos Framework Manager
- IBM Cognos Cube Designer
- IBM Cognos Metric Designer
- IBM Cognos Metric Studio
- IBM Cognos Report Studio
- IBM Cognos Software Development Kit
- IBM Cognos Dynamic Query Analyzer

Business Analysts are not authorized to use any of the following components or functions of the Program or Supporting Program:

- IBM Cognos Administration
- IBM Cognos Workspace Advanced
- IBM Cognos Business Intelligence Transformer
- IBM Cognos Event Studio
- IBM Cognos Framework Manager
- IBM Cognos Cube Designer
- IBM Cognos Metric Designer
- IBM Cognos Metric Studio
- IBM Cognos Query Studio
- IBM Cognos Report Studio
- IBM Cognos Insight
- IBM Cognos Software Development Kit
- IBM Cognos Dynamic Query Analyzer

Business Authors are not authorized to use any of the following components or functions of the Program or Supporting Program:

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- IBM Cognos Workspace Advanced
- IBM Cognos Business Intelligence Transformer
- IBM Cognos Event Studio
- IBM Cognos Framework Manager
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- IBM Cognos Metric Designer
- IBM Cognos Metric Studio
- IBM Cognos Report Studio
- IBM Cognos Insight
- IBM Cognos Software Development Kit
- IBM Cognos Dynamic Query Analyzer

Business Managers are not authorized to use any of the following components or functions of the Program or Supporting Program:

- IBM Cognos Administration
- IBM Cognos Analysis Studio
- IBM Cognos Workspace Advanced
- IBM Cognos Business Intelligence Transformer
- IBM Cognos Event Studio
- IBM Cognos Framework Manager
- IBM Cognos Cube Designer
- IBM Cognos Query Studio
- IBM Cognos Report Studio
- IBM Cognos Insight
- IBM Cognos Software Development Kit
- IBM Cognos Dynamic Query Analyzer

Enhanced Consumers are not authorized to use any of the following components or functions of the Program or Supporting Program:

- IBM Cognos Administration
- IBM Cognos Analysis Studio
- IBM Cognos Workspace Advanced
- IBM Cognos Business Intelligence Transformer
- IBM Cognos Event Studio
- IBM Cognos Framework Manager
- IBM Cognos Cube Designer
- IBM Cognos Metric Designer
- IBM Cognos Metric Studio
- IBM Cognos Query Studio
- IBM Cognos Report Studio
- IBM Cognos Insight
- IBM Cognos Software Development Kit
- IBM Cognos Dynamic Query Analyzer

Consumers are not authorized to use any of the following components or functions of the Program or Supporting Program:

- IBM Cognos Administration
- IBM Cognos Analysis Studio
- IBM Cognos Workspace
- IBM Cognos Workspace Advanced
- IBM Cognos Business Intelligence Transformer
- IBM Cognos Event Studio
- IBM Cognos Framework Manager
- IBM Cognos Cube Designer
- IBM Cognos Metric Designer
- IBM Cognos Metric Studio
- IBM Cognos Mobile
- IBM Cognos Query Studio
- IBM Cognos Report Studio
- IBM Cognos Insight
- IBM Cognos Software Development Kit
- IBM Cognos Dynamic Query Analyzer
- IBM Connections
- Receive Active Report Outputs

Recipients are not authorized to use any of the following components or functions of the Program or Supporting Program:

- IBM Cognos Administration
- IBM Cognos Analysis Studio
- IBM Cognos Workspace
- IBM Cognos Workspace Advanced
- IBM Cognos Business Intelligence Transformer
- IBM Cognos Event Studio
- IBM Cognos for Microsoft Office
- IBM Cognos Framework Manager
- IBM Cognos Cube Designer
- IBM Cognos Metric Designer
- IBM Cognos Metric Studio
- IBM Cognos Mobile
- IBM Cognos Query Studio
- IBM Cognos Report Studio
- IBM Cognos Insight
- IBM Cognos Software Development Kit
- IBM Cognos Dynamic Query Analyzer
- IBM Connections
- Execute Reports and respond to prompts in Cognos Connection
- Receive Active Report Outputs

Active Report Recipients are not authorized to use any of the following components or functions of the Program or Supporting Program:

- IBM Cognos Administration
- IBM Cognos Analysis Studio
- IBM Cognos Workspace
- IBM Cognos Workspace Advanced
- IBM Cognos Business Intelligence Transformer
- IBM Cognos Connection
- IBM Cognos Event Studio
- IBM Cognos for Microsoft Office
- IBM Cognos Framework Manager
- IBM Cognos Cube Designer
- IBM Cognos Metric Designer
- IBM Cognos Metric Studio
- IBM Cognos Mobile
- IBM Cognos Query Studio
- IBM Cognos Report Studio
- IBM Cognos Insight
- IBM Cognos Viewer
- IBM Cognos Software Development Kit
- IBM Cognos Dynamic Query Analyzer
- IBM Connections

Remote Recipients are not authorized to use any of the following components or functions of the Program or Supporting Program:

- IBM Cognos Administration
- IBM Cognos Analysis Studio
- IBM Cognos Workspace
- IBM Cognos Workspace Advanced
- IBM Cognos Business Intelligence Transformer
- IBM Cognos Connection
- IBM Cognos Event Studio
- IBM Cognos Framework Manager
- IBM Cognos Cube Designer
- IBM Cognos for Microsoft Office
- IBM Cognos Metric Designer

- IBM Cognos Metric Studio
- IBM Cognos Mobile
- IBM Cognos Query Studio
- IBM Cognos Report Studio
- IBM Cognos Insight
- IBM Cognos Viewer
- IBM Cognos Software Development Kit
- IBM Cognos Dynamic Query Analyzer
- IBM Connections

Users covered only by a "Limited Use" entitlement are not authorized to use any of the following components or functions of the Program or Supporting Program:

- IBM Connections

Administrators are permitted to perform administrative functions for the following other Programs

- IBM Cognos Business Intelligence PowerPlay Server
- IBM Cognos Business Intelligence Reporting
- IBM Cognos Metrics Server
- IBM Cognos Real-time Monitoring

Architects are permitted to perform administrative functions for the following other Programs

- IBM Cognos Real-time Monitoring

Architects, Users, Professionals, Professional Authors, Advanced Business Authors, Business Analysts, Business Managers, Business Authors, and Enhanced Consumers are also permitted to use the following component if Licensee has licensed IBM Cognos Real-time Monitoring:

- IBM Cognos Real-time Monitoring Dashboard

If the Program is designated as "Add-on", Users of the Program must be covered by an entitlement to one of the following user roles:

- IBM Cognos Business Intelligence Administrator
- IBM Cognos Business Intelligence Professional
- IBM Cognos Business Intelligence Professional Author
- IBM Cognos Business Intelligence Advanced Business Author

- IBM Cognos Business Intelligence Business Analyst
- IBM Cognos Business Intelligence Business Manager
- IBM Cognos Business Intelligence Business Author
- IBM Cognos Business Intelligence Enhanced Consumer
- IBM Cognos Business Intelligence Consumer

Users covered by the "IBM Cognos Business Intelligence Analysis Studio Add-on" or "IBM Cognos Business Intelligence Analysis Studio Add-on Limited Use" entitlement are also permitted to use the following components or functions of the Program:

- IBM Cognos Analysis Studio

Users covered by the "IBM Cognos Business Intelligence Event Studio Add-on" or "IBM Cognos Business Intelligence Event Studio Add-on Limited Use" entitlement are also permitted to use the following components or functions of the Program:

- IBM Cognos Event Studio

Users covered by the "IBM Cognos Business Intelligence Query Studio Add-on" or "IBM Cognos Business Intelligence Query Studio Add-on Limited Use" entitlement are also permitted to use the following components or functions of the Program:

- IBM Cognos Query Studio

Users covered by the "IBM Cognos Business Intelligence Report Studio Express Author Add-on" or "IBM Cognos Business Intelligence Report Studio Express Author Add-on Limited Use" entitlement are also permitted to use the following components or functions of the Program:

- IBM Cognos Workspace Advanced formerly IBM Cognos Business Intelligence Report Studio Express Authoring mode

Users covered by the "IBM Cognos Collaboration" entitlement must also be covered by an entitlement to one of the following user roles:

- IBM Cognos Business Intelligence User
- IBM Cognos Business Intelligence Professional
- IBM Cognos Business Intelligence Professional Author
- IBM Cognos Business Intelligence Advanced Business Author
- IBM Cognos Business Intelligence Business Analyst
- IBM Cognos Business Intelligence Business Manager
- IBM Cognos Business Intelligence Business Author
- IBM Cognos Business Intelligence Enhanced Consumer

Users covered by the "IBM Cognos Collaboration" entitlement are also permitted to use the following components or functions of the Program or Supporting Program:

- IBM Connections

Supporting Program Details

IBM Connections
- Use Limitations: Unrestricted

IBM DB2 Workgroup Server Edition
- Entitlement: Ratio 1/1
- Use Limitations: Use by Principal Program

"Ratio n/m" means that Licensee receives some number ('n') entitlements for the Supporting Program for every specified number ('m') entitlements of the Principal Program as a whole. Unless otherwise specified, the number of entitlements for the Supporting Program is rounded up to a multiple of 'n'. For example, if a Program includes 100 PVUs for a Supporting Program for every 500 PVUs obtained of the Principal Program and Licensee acquires 1,200 PVUs of the Program, Licensee may install the Supporting Program and have processor cores available to or managed by it of up to 300 PVUs. Those PVUs would not need to be counted as part of the total PVU requirement for Licensee's installation of the Program on account of the installation of the Supporting Program (although those PVUs might need to be counted for other reasons, such as the processor cores being made available to the Principal Program, as well).

"Use by Principal Program" means that the Supporting Program is provided exclusively for use by the Principal Program. Neither Licensee nor any application, program or device is authorized to directly use or access the services of the Supporting Program except Licensee may access the Supporting Program to perform administrative functions for the Supporting Program such as backup, recovery and authorized configuration

"Unrestricted" means that, notwithstanding the language above, Licensee's right to use the Supporting Program is not limited to use only in support of Licensee's use of the Principal Program. While the other restrictions on Licensee's use of the Supporting Program continue to apply, Licensee may use the Supporting Program for purposes independent of the licensed use of the Principal Program.

L/N: L-LCOE-972KDN
O/N: L-LCOE-972KDN
P/N: L-LCOE-972KDN

← Return to previous page

eScholar®
Expand Knowledge — Improve the Future

THIS SOFTWARE LICENSE AND SUPPORT AGREEMENT (this "Agreement") is made as of _____ __, 2013_ ("Effective Date"), between eScholar LLC, a New York limited liability company with offices located at 222 Bloomingdale Road, White Plains New York 10605 ("eScholar" or "Licensor"), and the State of West Virginia by and through its Agency the West Virginia Department of Education with its principal offices located at 1900 Kanawha Boulevard, East Charleston, WV 25305 ("Licensee").

WHEREAS, eScholar is the owner and Licensor of certain "Licensed Products" (as defined in this Agreement).

NOW THEREFORE, the parties agree as follows:

1. Definitions.

"Authorized Configuration" means the software and hardware specifications published in eScholar's then current Documentation for the Licensed Products.

"Confidential Information" has the meaning set forth in Section 10.

"Distribute" means to market, promote, sell, assign, distribute, license, sub-license, lease, disclose or otherwise transfer to any Person.

"Documentation" means any specifications, user manuals or other documentation supplied by eScholar with the Licensed Products.

"Enhancements" means general release changes to the Licensed Products made pursuant to the Limited Warranty or Exhibit 2, including corrections of Errors or other modifications.

"Error" means a failure of the Licensed Products to operate in accordance with the Authorized Configuration.

"Improvements" means, collectively, any Enhancements, New Releases or supporting Documentation provided by eScholar pursuant to the Limited Warranty or Exhibit 2,

"Intellectual Property" means all forms of intellectual property rights and protections owned by eScholar and may include, without limitation all right, title and interest in and to, (i) any computer programs, subroutines, charts, databases, manuals, assessments, document sequences and formats, business requirements, technical architecture, creative briefs, functional briefs, screen flows, design concepts, project schedules, cost estimates, needs assessments and documentation, tools and deliverables, and all derivative works derived from the above, (ii) trade secrets, and all trade secret rights and equivalent rights arising under the common law, state law, federal law and laws of foreign countries; (iii) copyrights, whether or not protected by copyright, under the common law, state law, federal law and laws of foreign countries; (iv) Marks, and (v) Confidential Information.

"Licensed Products" means the licensed software and Documentation described in Exhibit 1, and includes any Improvements made pursuant to the Limited Warranty or Exhibit 2.

"Limited Warranty" has the meaning set forth in Section 4.1.

"Marks" means the proprietary trademarks, trade names, symbols, logos and/or brand names, under common law, state law, federal law and laws of foreign countries owned or controlled by a party that are commercially identified or associated with such party and/or one or more of the party's products,

"New Releases" means new editions of the Licensed Products released pursuant to the Limited Warranty or Exhibit 2.

"Person" means any individual, sole proprietorship, partnership, joint venture, trust, unincorporated organization, association, corporation, institution, entity or government, including, without limitation, any subsidiary, instrumentality, division, agency, body or department thereof.

"Proposal" means a proposal from the Licensor or the proposed prime contractor on a proposal where the Licensor is a subcontractor.

"Third Party Software" means software that eScholar has the right to license and which it bundles in its Licensed Products. Licensee agrees that all licenses for Third Party Software provided hereunder shall exist directly between eScholar and the provider of Third Party Software.

2. License.

2.1 License Grant. Subject to the terms and conditions of this Agreement and the Exhibits attached hereto and incorporated herein by reference (including without limitation the payment of all "License Fees" as set forth in Exhibit 1, and the terms and conditions of Exhibit 3, which sets forth additional terms and conditions with respect to Third Party Software), eScholar grants Licensee a perpetual, non-exclusive, non-transferable, non-sublicensable license to use and copy for its own use the Licensed Products within the United States of America only for Licensee's own internal, non-commercial computing operations to address the Licensee's requirements described in RFP# EDD398772, subject to the License Restrictions described in Exhibit 1. Any rights not expressly granted in this Agreement are expressly reserved by eScholar.

2.2 Restrictions on Use of the Licensed Products. Licensee shall not Distribute the Licensed Products, in whole or in part, to any third party. Licensee is strictly prohibited from causing or permitting the reverse engineering, disassembly or decompilation, alterations or modifications to the Licensed Products. Any violation of this paragraph 2.2 constitutes a material violation of this Agreement (subject to the applicable cure period provided herein).

2.3 U.S. Government Restricted Rights. If Licensee is an agency or instrumentality of the United States, then pursuant to 48 CFR 12.212, the Software shall be deemed to be Commercial Computer Software, the Documentation shall be deemed to be Commercial Computer Software Documentation, and the U.S. Government shall acquire only the rights expressly granted by this Agreement.

3. Payment and Taxes.

3.1 Licensee will make the License Fee payments in accordance with the payment schedule as more fully set forth in Exhibit 1. Said payments will be payable upon Licensee's receipt of eScholar's undisputed invoice for the Licensed Products. Licensee agrees to promptly notify eScholar in writing of any invoice considered by Licensee to be in dispute and the parties agree to work in good faith to resolve such dispute(s) in a timely manner. Those payments that are remitted by Licensee more than forty-five (45) days after receipt of undisputed invoice by Licensor are considered late payments ("Late Payment") and are subject to a late charge equal to one and one-half (1.5%) percent per month on the outstanding balance.

3.2 In addition to the Fees set forth in Exhibit 1, Licensee is responsible for the payment, on a timely basis, of all sales, use, value added or other taxes, federal, state or otherwise, however designated, which are levied or imposed by reason of the transactions contemplated by this Agreement, except for taxes on Licensor's net income, or shall furnish to eScholar evidence acceptable to the taxing authority to sustain an exemption therefrom.

4. Limited Warranty; Disclaimer; Election of Remedies; Indemnification.

4.1 Limited Warranty. eScholar warrants to Licensee that it will provide a warranty as described in the request for proposal (the "Warranty Period"), Licensed Products will operate without Error (the "Limited Warranty"). For each Error occurring during the Warranty Period, eScholar, as soon as reasonably practicable and at its own expense, will use reasonable efforts to correct such Error. If eScholar is unable to correct an Error by using reasonable efforts, then, subject to the limitations set forth herein, eScholar may refund to Licensee the actual License Fees and Support Fees (set forth in Exhibit 1), if any, paid for such Licensed

Products that eScholar was unable to correct. This remedy is exclusive and is in lieu of any other remedies at law or otherwise that Licensee may have; provided however that this Limited Warranty shall be null and void in the event (i) any Person (including Licensee) other than eScholar modifies the Licensed Products or (ii) Licensee does not implement Improvements, or (iii) any Person (including Licensee) other than eScholar violates Section 2.2 of this Agreement.

4.2 Disclaimer of Warranty. The Limited Warranty is made to Licensee exclusively and in lieu of all other express or implied warranties. **eScholar MAKES NO OTHER WARRANTIES WHATSOEVER, EXPRESS OR IMPLIED, WITH REGARD TO THE LICENSED PRODUCTS AND THE SUPPORT SERVICES (AS SET FORTH IN EXHIBIT 2), IN WHOLE OR IN PART. eScholar EXPLICITLY DISCLAIMS ALL WARRANTIES OF MERCHANTABILITY AND OF FITNESS FOR A PARTICULAR PURPOSE. eScholar EXPRESSLY DOES NOT WARRANT THAT THE LICENSED PRODUCTS AND SUPPORT SERVICES, IN WHOLE OR IN PART, WILL BE ERROR FREE, WILL OPERATE WITHOUT INTERRUPTION OR WILL BE COMPATIBLE WITH ANY HARDWARE OR SOFTWARE OTHER THAN THE AUTHORIZED CONFIGURATION. LICENSEE WAIVES ANY CLAIM THAT THE LIMITED WARRANTY OR THE REMEDY FOR BREACH OF SUCH LIMITED WARRANTY FAILS OF ITS ESSENTIAL PURPOSE. eScholar's AGENTS AND SUPPLIERS MAKE NO WARRANTY WITH RESPECT TO THE LICENSED PRODUCTS AND SUPPORT SERVICES AND/OR PROFESSIONAL SERVICES SUPPLIED BY eScholar, AND THE FOREGOING WARRANTY DISCLAIMERS AND EXCLUSIONS SHALL ALSO APPLY TO eScholar's AGENTS AND SUPPLIERS WHO SHALL BE DEEMED INTENDED BENEFICIARIES OF SUCH PROVISIONS**

5. Term. The license term commences upon the Effective Date and shall be perpetual in accordance with this Agreement ("License Period"). At each annual anniversary date after the Effective Date, the Licensee can, at its option, elect to procure Software Support including Improvements for the successive twelve (12) month period (each a "Software Support Renewal Period") unless terminated by either party upon at least ninety (90) days written notice. Notwithstanding the above, this Agreement and all license rights granted hereunder, shall automatically terminate in the following circumstances: (i) Licensee fails to pay the applicable License Fee and/or Support Fee for Licensed Products, and does not cure such failure within ten (10) calendar days following written notice by eScholar to Licensee; or (ii) Licensee breaches any other material provision of this Agreement with respect to Licensed Products, and fails to cure such breach within thirty (30) calendar days following written notice by eScholar to Licensee. Licensee shall, upon termination of this Agreement: (i) discontinue all use of the Licensed Products; (ii) deliver to Licensor all diskettes or any other materials containing the Licensed Products and all other physical copies of the Licensed Products; (iii) destroy the Licensed Products and all copies of the Licensed Products contained in any computer memory or data storage apparatus under the control of Licensee; and (iv) certify to Licensor within ten (10) days after termination of this Agreement that Licensee has delivered to Licensor and destroyed the Licensed Products and all copies of the Licensed Products. Licensee further agrees and acknowledges that any violations of this Section 5 shall entitle eScholar to injunctive relief, without the necessity of proving the inadequacy of monetary damages or the posting of any bond or security, enjoining or restraining Licensee from any such violation or threatened violation.

6. Termination. Either party may terminate this Agreement immediately (subject to the applicable cure period) if the other party materially violates the Agreement. Notwithstanding the above, all obligations to pay monies owed to eScholar shall survive any such termination hereunder.

7. Software Support. During the Term of this Agreement commencing on the Effective Date, eScholar shall provide Licensee with Support Services for the Licensed Products in accordance with the terms and conditions set forth in Exhibit 2. In the event that Licensee is not current in payment of its invoices, Support Services can be withheld at eScholar's option.

8. eScholar Intellectual Property Ownership. eScholar retains all right, title and interest in the Licensed Products, including in any and all intellectual property rights in the same, including any Improvements to the Licensed Products.

9. Copies; Ownership and Use of Marks. Licensee may make copies of the Licensed Products or any part thereof, provided that its use of all such copies is in accordance with the terms of this Agreement. Licensee shall not remove any Licensor Licensed Products Mark or other proprietary notice that appears on or in the copies of the Licensed Products delivered to Licensee and Licensee shall retain such Licensor Licensed Products Marks and notices on all or partial copies of the Licensed Products, except as otherwise provided herein.

10. Confidential Information. During the relationship established by this Agreement, either party may communicate to the other party or its agents, certain information that it considers confidential or proprietary. Each party will employ the same efforts to protect the other party's confidential and proprietary information that it applies to protect its own confidential and proprietary information. "Confidential Information" shall mean non-public information of a party to this Agreement.

"Confidential Information" of eScholar includes, without limitation, the Intellectual Property, pricing information with respect to this Agreement, cost estimates and deliverable schedules, if any, the Licensed Products, all software or related materials provided with the Licensed Products, and algorithms, methods, techniques and processes revealed by the Licensed Products. Licensee shall only disclose Confidential Information to Persons on a need to know basis.

"Confidential Information" for the Licensee includes all information relating to the Licensee including, but not limited to, proprietary information, financial information, information relating to students, staff, and employees, and information relating to the assets of Licensee specifically and without limitation, any passwords or user names, and any computer software or technology whether or not owned or licensed by Licensee.

Confidential Information shall not include information that the party receiving the information (the "Receiving Party") can demonstrate by reasonable written evidence contemporaneous with the event of the exclusion sought to be used hereunder: (a) was already known to it at the time of its receipt hereunder; (b) is or becomes generally available to the public other than by means of breach of this Agreement; (c) is independently obtained from a third party whose disclosure to the Receiving Party does not violate a duty of confidentiality; (d) is independently developed by or on behalf of the Receiving Party without use of, reference to or reliance on any Confidential Information. If the Receiving Party is required by a court or other body of competent jurisdiction to disclose the Confidential Information, the Receiving Party may disclose only so much Confidential Information as is legally required and only after the Receiving Party has given notice of such compelled disclosure to the disclosing party and given the disclosing party a reasonable opportunity to object to such disclosure and provided reasonable assistance in obtaining and enforcing a protective order or other appropriate means of safeguarding any Confidential Information required to be disclosed.

11. Data Access Rights. Licensee hereby grants eScholar rights to view and interact with Licensee's data to enable eScholar to support the Licensee's use of eScholar's products, troubleshoot and diagnose any technical issues, and to improve eScholar products and services. eScholar will be granted no other rights to view or interact or otherwise use Licensee's data. eScholar will maintain the confidentiality and security of all Licensee data according to FERPA (Family Education Rights and Privacy Act) guidelines.

12. Independent Contractor. eScholar is Licensee's independent contractor and not Licensee's agent, employee or partner.

13. Governing Law. The parties hereby agree that this Agreement will be governed by the laws of the State of West Virginia, without reference to conflicts of law principles.

14. Mergers, Modifications, Notices. This Agreement is the entire Agreement between the parties regarding the specified services. It supercedes all prior proposals and agreements. It may be only changed in writing, signed by both parties. Notices will be effective upon receipt.

15. No Assignment. This Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective successors and permitted assigns, but neither this Agreement nor any of the rights, interests, or obligations hereunder shall be assigned, either in whole or in part, without the prior written consent of the other party hereto, and any unauthorized assignment shall be null and void; provided however that eScholar may transfer or assign this Agreement to another entity without the prior written consent of Licensee in the event of a merger, consolidation, stock sale, asset sale or other transaction involving the sale or other transfer of all or substantially all of the business or assets of eScholar.

16. Entire Agreement. This Agreement and the documents referred to herein (including the Exhibits listed below) contain the complete agreement between the parties hereto and supersede any prior understandings, agreements or representations by or between the parties, written or oral, which may have related to the subject matter hereof.

Exhibit 1 – Licensed Products, Software License Fees and Other Pertinent Fees
Exhibit 2 – Support Services Addendum
Exhibit 3 – Additional Terms and Conditions for Third Party Software

Each party has read, understands and agrees to the terms and conditions of this Agreement

eScholar LLC		**Licensee: the State of West Virginia Department of Education**	
By	_____	By	_____
Name	_____	Name	_____
Title	_____	Title	_____

EXHIBIT 1

LICENSED PRODUCTS

SOFTWARE LICENSE FEES AND OTHER PERTINENT FEES

Software Description	License Fee	Payment Schedule
eScholar Complete Data Warehouse (eScholar CDW)		
License	See Proposal Cost Summary	See Proposal Cost Summary
Initial Support Period	See Proposal Cost Summary	See Proposal Cost Summary
Renewal Support Period	See Proposal Cost Summary	See Proposal Cost Summary
eScholar EDEN/EDFacts solution		
License	See Proposal Cost Summary	See Proposal Cost Summary
Initial Support Period	See Proposal Cost Summary	See Proposal Cost Summary
Renewal Support Period	See Proposal Cost Summary	See Proposal Cost Summary
eScholar Framework for Cognos		
License	See Proposal Cost Summary	See Proposal Cost Summary
Initial Support Period	See Proposal Cost Summary	See Proposal Cost Summary
Renewal Support Period	See Proposal Cost Summary	See Proposal Cost Summary

*** License Restrictions:**
A. See Proposal for the number of software instances, the use of the software and other license restrictions.

EXHIBIT 2

SUPPORT SERVICES ADDENDUM

Licensee agrees to the following terms and conditions with respect to the standard technical and support services provided by eScholar (collectively, the "Support Services").

1. **Support Services.**

(a) General Licensed Product Assistance. eScholar shall provide to Licensee's designees set forth below in Section 5, telephone and/or on-line technical and support services for general product questions, including, by way of example, those questions relating to the use and understanding of the Licensed Products ("**Product Assistance**")

(b) Error Correction. eScholar shall use commercially reasonable efforts to promptly correct Errors occurring after the Warranty Period reported by Licensee, or identified by eScholar. In reporting Errors, Licensee shall identify the level of priority by written notice to eScholar ("**Priority Rating**"). For purposes of this Agreement, "Priority Rating" means the following, (a) "Class A Priority": shall constitute an Error in connection with the Licensed Product, and (b) "Class B Priority" shall constitute a substantial interruption of the Licensed Product. Non-material program defects and cosmetic defects will be addressed in New Releases or, at Licensee's option, through the execution of a Professional Services Agreement.

(c) Improvements. eScholar shall, from time to time, deliver Improvements to Licensee as they become generally available, and Licensee hereby agrees to install all Enhancements and New Releases, at eScholar's direction.

2. **Term and Termination.** The initial support term commences upon the Effective Date and terminates twelve (12) months thereafter in accordance with this Agreement ("**Initial Support Period**"). At the end of the Initial Support Period, the support period will automatically renew for successive twelve (12) month periods (each a "**Renewal Support Period(s)**") unless terminated by either party upon at least ninety (90) days written notice; provided however that Licensee agrees and acknowledges that cancellation of the Initial Support Period or Renewal Support Period(s) shall result in the immediate termination of the Agreement.

3. **Payment.** Licensee will make the Support Fee payments in accordance with the payment schedule as more fully set forth in Exhibit 1. Late Payments are subject to a late charge equal to one and one-half percent (1.5%) per month of the outstanding balance.

4. **Exclusions.** eScholar's Support Services shall not apply to any Error caused by Licensee's Misuse of the Licensed Products. For purposes of this Agreement, "**Misuse**" means, (i) any unauthorized modification of the Authorized Configuration of the Licensed Products; or (iii) any failure on Licensee's part to properly install the Licensed Products (including any Improvements to the Licensed Products).

5. **Support Contacts**.
eScholar shall provide Product Assistance from 8am to 7pm Eastern Standard Time Monday through Friday (except United States government holidays) and will use commercially reasonable efforts to provide service level response within two (2) hours of Licensee's original telephone call or on-line notification. The below Licensee Administrative Contacts, who will have received training from eScholar, as required, will serve as the focal point for issues regarding use of the Licensed Products.

1. _____ Data Supply Contact (responsible for providing data to eScholar)
2. _____ Data Administrator (responsible for resolving data questions and issues)
3. _____ Security Contact (authorized to administer user access to data)
4. _____ Alternate Security Contact
5. _____ Main User Contact (authorized to contact eScholar's support staff)
6. _____ Alternate User Contact

EXHIBIT 3

Additional Terms and Conditions for
Third Party Software

License to TPS is on the same terms and conditions as are set out above to use the TPS only for its internal business purposes as part of the Licensed Products, and not for any further resale, re-license or other use by the Licensee or third parties;

Licensee shall not remove, alter, cover or obfuscate any copyright notices or other proprietary rights notices placed or embedded by the provider or owner of the TPS on or in any TPS or related documentation;

The provider or owner of the TPS, as applicable, retains all right, title and interest (including all intellectual property rights) in and to the TPS and related documentation. Licensee agrees to be bound by confidentiality obligations with respect to such materials that are at least as protective as those undertaken by Licensee with respect to the Licensed Products in this Agreement;

Licensee agrees not to (i) lease, rent or engage in any time-sharing of the TPS; (ii) modify or create any derivative work of any TPS; or (iii) reverse assemble, decompile, reverse engineer or otherwise attempt to derive source code or algorithms of the TPS; and

Licensee acknowledges that the laws and regulations of the United States restrict the export of the TPS. End User agrees that it will not export or re-export the TPS in any form without first obtaining the appropriate United States and foreign government approvals.

The provider or owner of the TPS, as applicable, makes no warranties to the Licensee in connection with the TPS or documentation of any kind, and expressly disclaims any implied warranties of merchantability, or fitness for a particular use; and

The provider or owner of the TPS, as applicable, shall not be liable to the End User for any indirect, consequential, incidental or special damages arising out of its use of the Software, regardless of the theory of liability (including negligence and strict liability), to the maximum extent permitted by law. These limitations shall apply notwithstanding the failure of the essential purpose of any limited remedy.

State of West Virginia
Department of Administration
Purchasing Division
2019 Washington Street East
Post Office Box 50130
Charleston, WV 25305-0130

Solicitation

NUMBER	PAGE
EDD398772	1

ADDRESS CORRESPONDENCE TO ATTENTION OF:
CONNIE OSWALD
304-558-2157

VENDOR
RFQ COPY
TYPE NAME/ADDRESS HERE

SHIP TO
DEPARTMENT OF EDUCATION
BUILDING 6
1900 KANAWHA BOULEVARD, EAST
CHARLESTON, WV
25305-0330

DATE PRINTED 10/07/2013

BID OPENING DATE: 10/15/2013 BID OPENING TIME 1:30PM

LINE	QUANTITY	UOP	CAT NO.	ITEM NUMBER	UNIT PRICE	AMOUNT

ADDENDUM NO. 3

1. TO PROVIDE THE ANSWER TO A QUESTION RECEIVED FOR THIS SOLICITATION REGARDING THE PERFORMANCE BOND. NO FURTHER QUESTIONS WILL BE ACCEPTED.
2. TO PROVIDE REVISED TERMS & CONDITIONS TO REFLECT THE REVISED PERFORMANCE BOND AMOUNT OF $300,000.00
3. TO MOVE THE BID OPENING FROM: 10/9/2013
   TO: 10/15/2013

   SAME TIME AND LOCATION.
4. TO PROVIDE THE ADDENDUM ACKNOWLEDGMENT.

END OF ADDENDUM NO. 3

10/10/13 01:57:28 PM
West Virginia Purchasing Division

SIGNATURE	TELEPHONE	DATE
	973-802-5311 / FAX: 908-803-0173	October 9, 2013
TITLE: Director	FEIN: 06-1454513	ADDRESS CHANGES TO BE NOTED ABOVE

WHEN RESPONDING TO SOLICITATION, INSERT NAME AND ADDRESS IN SPACE ABOVE LABELED 'VENDOR'

SOLICITATION NUMBER: EDD398772
Addendum Number: 03

The purpose of this addendum is to modify the solicitation identified as ("Solicitation") to reflect the change(s) identified and described below.

Applicable Addendum Category:

- [✓] Modify bid opening date and time
- [ ] Modify specifications of product or service being sought
- [✓] Attachment of vendor questions and responses
- [ ] Attachment of pre-bid sign-in sheet
- [ ] Correction of error
- [ ] Other

Description of Modification to Solicitation:

1. To provide the answer to a question received for this solicitation regarding the Performance Bond.
2. To provide revised terms & conditions to include a Performance Bond of $300,000.00
3. To move the bid opening date from 10/9/13 to 10/15/13 at 1:30 pm; same location.
4. To provide the addendum acknowledgment.

Additional Documentation: Documentation related to this Addendum (if any) has been included herewith as Attachment A and is specifically incorporated herein by reference.

Terms and Conditions:

1. All provisions of the Solicitation and other addenda not modified herein shall remain in full force and effect.

2. Vendor should acknowledge receipt of all addenda issued for this Solicitation by completing an Addendum Acknowledgment, a copy of which is included herewith. Failure to acknowledge addenda may result in bid disqualification. The addendum acknowledgement should be submitted with the bid to expedite document processing.

ATTACHMENT A

EDD398772

Question and Response

1. We are unclear as to why a Performance Bond was inserted into this RFP. The reason for our uncertainty is that there is no matrix, list, or schedule as to how WV DOE will judge the chosen vendor on their performance. There is also no stated information as to how a bond may be credited back to our company, and how that process will come to fruition. Without justification on why this was inserted, the associated parameters & measures for judging any particular vendor's response, and how your organization plans to refund these fees, it's nearly impossible for anyone to fully commit to this project.

Response:

The apparent successful Vendor shall provide a performance bond in the amount of $300,000. The six (VI) goals of the Request for Proposal shall be the benchmark to determine completion of the awarded contract. The Performance Bond shall permit a reduction of $50,000 per the completion of each RFP goal. Upon the stated completion of each goal, both contractual parties must agree in writing that the specified goal has been completed, thus granting permission of a $50,000 one time reduction per each goal.

REQUIRED DELIVERABLES to qualify for Performance Bond Reduction of $50,000:

GOAL I: Architecture, Infrastructure, and Development

All aspects of the proposal must adhere to rules and regulations set forth in the, Child Information Protection Act (CIPA), Family Educational Rights and Privacy Act (FERPA), Child Online Protection Act (COPA), and Health Insurance Portability and Accountability Act (HIPAA).

The proposed DWRS must support encryption for data in transit and for data at rest.

The proposed DWRS must be compatible with Internet Explorer 5.0 or later, FireFox, Safari, and Chrome browsers.

Operating systems, databases, and additional software must include tools with documentation, current support plans, and evidence of an existing user base.

Operating systems for all proposed servers must have the capability to receive automated upgrades, based on the patch management recommendations of the manufacturers of those operating systems, without negatively impacting the functionality of the DWRS.

The proposed solution must be able to function within the West Virginia educational system network environment.

All software components must have a maintenance plan including regular, automatic update releases.

GOAL II: Technical Support

The successful Vendor must train WVDE staff in the following areas, which are directly related to the Vendor's proposed solution: hardware, software, networking, and platform integration.

The successful Vendor must document processes and transfer knowledge of those processes to the Agency, (e.g., business rules, system documentation, etc.)

The successful Vendor must provide a solution that allows for cross-platform data exchange and secure data transformation.

GOAL III: Analysis and Reporting

The proposed reporting solution must integrate with the data warehouse as part of a larger DWRS solution.

The Vendor's solution must include a dynamic reporting engine that includes report-building capabilities, which allows for data to be displayed

in tables and graphs/graphical representations with flexible, professional-looking output for both electronic and print-optimized consumption.

The Vendor's solution must have the capacity for users to develop and run ad hoc and a priori queries and reports.

The Vendor's solution must have the capacity to export database files in multiple formats.

The Vendor's proposed reporting tool must handle at least 15 concurrent users for developing static reports to be deployed through the DWRS.

The Vendor's solution must allow for the deployment of publicly available reports with static, "canned" reports, suppression rules, and the ability to select parameters to run reports through standard web browser technology.

Must support role-specific access tied to Single-Sign-On (SSO) authentication.

Must be able to suppress/unsuppress what is displayed in reports depending on user access; must always be able to suppress student counts that are less than ten on public-facing sites.

GOAL IV: Professional Development Services

The Vendor responding to this RFP must provide professional development services for the following target audiences:

- WVDE developers and programmers responsible for system design, development, and implementation.
- Trainers who will be responsible for knowledge transfer to end-users at the SEA, LEA, school-buildings, and for the general public.
- End-users who will be accessing the DWRS to engage in data-driven decision making to improve educational outcomes for students.

The Vendor must provide face-to-face trainings for at least the WVDE developers, programmers, and train-the-trainer recipients.

The Vendor must provide face-to-face trainings for a select groups of end-users through User Acceptance Training to test system functionality.

GOAL V: Project Management

The Vendor must document all records of decision making, including, but not limited to:

- Agendas,
- The content of all meetings, and
- The substance of all decisions made during contract activities (e.g., meetings, reviews, conference calls).

The Vendor must present records of all content in 4.4.III. (Goal III) in a timely manner (i.e., within 5 business days) for review and confirmation of content. The Vendor will maintain version control (e.g., time/date stamps) of documents processed. All documents created and administered during the contract period will be cataloged and updated for WVDE use following conclusion of the contract.

The Vendor must use project management tools that track issues, provide notifications, and are accessible without the requirement to purchase software.

GOAL VI: Transition Strategy

THE SOLUTION SHALL NOT BE PROPRIETARY

Vendor must agree that the vendor-developed DWRS and all associated deliverables will be owned and operated by the WVDE upon project conclusion.

Vendor must relinquish ownership of the DWRS to the Agency upon project conclusion.

GENERAL TERMS AND CONDITIONS:

1. **CONTRACTUAL AGREEMENT:** Issuance of a Purchase Order signed by the Purchasing Division Director, or his designee, and approved as to form by the Attorney General's office constitutes acceptance of this Contract made by and between the State of West Virginia and the Vendor. Vendor's signature on its bid signifies Vendor's agreement to be bound by and accept the terms and conditions contained in this Contract.

2. **DEFINITIONS:** As used in this Solicitation / Contract, the following terms shall have the meanings attributed to them below. Additional definitions may be found in the specifications included with this Solicitation / Contract.

   2.1 **"Agency"** or **"Agencies"** means the agency, board, commission, or other entity of the State of West Virginia that is identified on the first page of the Solicitation or any other public entity seeking to procure goods or services under this Contract.

   2.2 **"Contract"** means the binding agreement that is entered into between the State and the Vendor to provide the goods and services requested in the Solicitation.

   2.3 **"Director"** means the Director of the West Virginia Department of Administration, Purchasing Division.

   2.4 **"Purchasing Division"** means the West Virginia Department of Administration, Purchasing Division.

   2.5 **"Purchase Order"** means the document signed by the Agency and the Purchasing Division, and approved as to form by the Attorney General, that identifies the Vendor as the successful bidder and Contract holder.

   2.6 **"Solicitation"** means the official solicitation published by the Purchasing Division and identified by number on the first page thereof.

   2.7 **"State"** means the State of West Virginia and/or any of its agencies, commissions, boards, etc. as context requires.

   2.8 **"Vendor"** or **"Vendors"** means any entity submitting a bid in response to the Solicitation, the entity that has been selected as the lowest responsible bidder, or the entity that has been awarded the Contract as context requires.

3. **CONTRACT TERM; RENEWAL; EXTENSION:** The term of this Contract shall be determined in accordance with the category that has been identified as applicable to this Contract below:

☑ **Term Contract**

Initial Contract Term: This Contract becomes effective on Upon Award and extends for a period of One (1) year(s).

Renewal Term: This Contract may be renewed upon the mutual written consent of the Agency, and the Vendor, with approval of the Purchasing Division and the Attorney General's office (Attorney General approval is as to form only). Any request for renewal must be submitted to the Purchasing Division Director thirty (30) days prior to the expiration date of the initial contract term or appropriate renewal term. A Contract renewal shall be in accordance with the terms and conditions of the original contract. Renewal of this Contract is limited to Two (2) successive one (1) year periods. Automatic renewal of this Contract is prohibited. Notwithstanding the foregoing, Purchasing Division approval is not required on agency delegated or exempt purchases. Attorney General approval may be required for vendor terms and conditions.

Reasonable Time Extension: At the sole discretion of the Purchasing Division Director, and with approval from the Attorney General's office (Attorney General approval is as to form only), this Contract may be extended for a reasonable time after the initial Contract term or after any renewal term as may be necessary to obtain a new contract or renew this Contract. Any reasonable time extension shall not exceed twelve (12) months. Vendor may avoid a reasonable time extension by providing the Purchasing Division Director with written notice of Vendor's desire to terminate this Contract 30 days prior to the expiration of the then current term. During any reasonable time extension period, the Vendor may terminate this Contract for any reason upon giving the Purchasing Division Director 30 days written notice. Automatic extension of this Contract is prohibited. Notwithstanding the foregoing, Purchasing Division approval is not required on agency delegated or exempt purchases, but Attorney General approval may be required.

Release Order Limitations: In the event that this contract permits release orders, a release order may only be issued during the time this Contract is in effect. Any release order issued within one year of the expiration of this Contract shall be effective for one year from the date the release order is issued. No release order may be extended beyond one year after this Contract has expired.

☐ **Fixed Period Contract:** This Contract becomes effective upon Vendor's receipt of the notice to proceed and must be completed within days.

☐ **One Time Purchase:** The term of this Contract shall run from the issuance of the Purchase Order until all of the goods contracted for have been delivered, but in no event shall this Contract extend for more than one fiscal year.

☐ **Other:** See attached.

4. **NOTICE TO PROCEED:** Vendor shall begin performance of this Contract immediately upon receiving notice to proceed unless otherwise instructed by the Agency. Unless otherwise specified, the fully executed Purchase Order will be considered notice to proceed

5. **QUANTITIES:** The quantities required under this Contract shall be determined in accordance with the category that has been identified as applicable to this Contract below.

☑ **Open End Contract:** Quantities listed in this Solicitation are approximations only, based on estimates supplied by the Agency. It is understood and agreed that the Contract shall cover the quantities actually ordered for delivery during the term of the Contract, whether more or less than the quantities shown.

☐ **Service:** The scope of the service to be provided will be more clearly defined in the specifications included herewith.

☑ **Combined Service and Goods:** The scope of the service and deliverable goods to be provided will be more clearly defined in the specifications included herewith.

☐ **One Time Purchase:** This Contract is for the purchase of a set quantity of goods that are identified in the specifications included herewith. Once those items have been delivered, no additional goods may be procured under this Contract without an appropriate change order approved by the Vendor, Agency, Purchasing Division, and Attorney General's office.

6. **PRICING:** The pricing set forth herein is firm for the life of the Contract, unless specified elsewhere within this Solicitation/Contract by the State. A Vendor's inclusion of price adjustment provisions in its bid, without an express authorization from the State in the Solicitation to do so, may result in bid disqualification.

7. **EMERGENCY PURCHASES:** The Purchasing Division Director may authorize the Agency to purchase goods or services in the open market that Vendor would otherwise provide under this Contract if those goods or services are for immediate or expedited delivery in an emergency. Emergencies shall include, but are not limited to, delays in transportation or an unanticipated increase in the volume of work. An emergency purchase in the open market, approved by the Purchasing Division Director, shall not constitute of breach of this Contract and shall not entitle the Vendor to any form of compensation or damages. This provision does not excuse the State from fulfilling its obligations under a One Time Purchase contract.

8. **REQUIRED DOCUMENTS:** All of the items checked below must be provided to the Purchasing Division by the Vendor as specified below.

☐ **BID BOND:** All Vendors shall furnish a bid bond in the amount of five percent (5%) of the total amount of the bid protecting the State of West Virginia. The bid bond must be submitted with the bid.

☑ **PERFORMANCE BOND:** The apparent successful Vendor shall provide a performance bond in the amount of $300,000.00 . The performance bond must be issued and received by the Purchasing Division prior to Contract award. On construction contracts, the performance bond must be 100% of the Contract value.

☐ **LABOR/MATERIAL PAYMENT BOND:** The apparent successful Vendor shall provide a labor/material payment bond in the amount of 100% of the Contract value. The labor/material payment bond must be issued and delivered to the Purchasing Division prior to Contract award.

In lieu of the Bid Bond, Performance Bond, and Labor/Material Payment Bond, the Vendor may provide certified checks, cashier's checks, or irrevocable letters of credit. Any certified check, cashier's check, or irrevocable letter of credit provided in lieu of a bond must be of the same amount and delivered on the same schedule as the bond it replaces. A letter of credit submitted in lieu of a performance and labor/material payment bond will only be allowed for projects under $100,000. Personal or business checks are not acceptable.

☐ **MAINTENANCE BOND:** The apparent successful Vendor shall provide a two (2) year maintenance bond covering the roofing system. The maintenance bond must be issued and delivered to the Purchasing Division prior to Contract award.

☑ **WORKERS' COMPENSATION INSURANCE:** The apparent successful Vendor shall have appropriate workers' compensation insurance and shall provide proof thereof upon request.

☑ **INSURANCE:** The apparent successful Vendor shall furnish proof of the following insurance prior to Contract award and shall list the state as a certificate holder:

☑ **Commercial General Liability Insurance:** $1,000,000.00 minimum or more.

☐ **Builders Risk Insurance:** builders risk – all risk insurance in an amount equal to 100% of the amount of the Contract.

☑ Professional Liability - $1,000,000.00 minimum

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The apparent successful Vendor shall also furnish proof of any additional insurance requirements contained in the specifications prior to Contract award regardless of whether or not that insurance requirement is listed above.

☐ **LICENSE(S) / CERTIFICATIONS / PERMITS:** In addition to anything required under the Section entitled Licensing, of the General Terms and Conditions, the apparent successful Vendor shall furnish proof of the following licenses, certifications, and/or permits prior to Contract award, in a form acceptable to the Purchasing Division.

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The apparent successful Vendor shall also furnish proof of any additional licenses or certifications contained in the specifications prior to Contract award regardless of whether or not that requirement is listed above.

9. **LITIGATION BOND:** The Director reserves the right to require any Vendor that files a protest of an award to submit a litigation bond in the amount equal to one percent of the lowest bid submitted or $5,000, whichever is greater. The entire amount of the bond shall be forfeited if the hearing officer determines that the protest was filed for frivolous or improper purpose, including but not limited to, the purpose of harassing, causing unnecessary delay, or needless expense for the Agency. All litigation bonds shall be made payable to the Purchasing Division. In lieu of a bond, the protester may submit a cashier's check or certified check payable to the Purchasing Division. Cashier's or certified checks will be deposited with and held by the State Treasurer's office. If it is determined that the protest has not been filed for frivolous or improper purpose, the bond or deposit shall be returned in its entirety.

10. **ALTERNATES:** Any model, brand, or specification listed herein establishes the acceptable level of quality only and is not intended to reflect a preference for, or in any way favor, a particular brand or vendor. Vendors may bid alternates to a listed model or brand provided that the alternate is at least equal to the model or brand and complies with the required specifications. The equality of any alternate being bid shall be determined by the State at its sole discretion. Any Vendor bidding an alternate model or brand should clearly identify the alternate items in its bid and should include manufacturer's specifications, industry literature, and/or any other relevant documentation demonstrating the equality of the alternate items. Failure to provide information for alternate items may be grounds for rejection of a Vendor's bid.

11. **EXCEPTIONS AND CLARIFICATIONS:** The Solicitation contains the specifications that shall form the basis of a contractual agreement. Vendor shall clearly mark any exceptions, clarifications, or

other proposed modifications in its bid. Exceptions to, clarifications of, or modifications of a requirement or term and condition of the Solicitation may result in bid disqualification.

12. **LIQUIDATED DAMAGES:** Vendor shall pay liquidated damages in the amount for

This clause shall in no way be considered exclusive and shall not limit the State or Agency's right to pursue any other available remedy.

13. **ACCEPTANCE/REJECTION:** The State may accept or reject any bid in whole, or in part. Vendor's signature on its bid signifies acceptance of the terms and conditions contained in the Solicitation and Vendor agrees to be bound by the terms of the Contract, as reflected in the Purchase Order, upon receipt.

14. **REGISTRATION:** Prior to Contract award, the apparent successful Vendor must be properly registered with the West Virginia Purchasing Division and must have paid the $125 fee if applicable.

15. **COMMUNICATION LIMITATIONS:** In accordance with West Virginia Code of State Rules §148-1-6.6, communication with the State of West Virginia or any of its employees regarding this Solicitation during the solicitation, bid, evaluation or award periods, except through the Purchasing Division, is strictly prohibited without prior Purchasing Division approval. Purchasing Division approval for such communication is implied for all agency delegated and exempt purchases.

16. **FUNDING:** This Contract shall continue for the term stated herein, contingent upon funds being appropriated by the Legislature or otherwise being made available. In the event funds are not appropriated or otherwise made available, this Contract becomes void and of no effect beginning on July 1 of the fiscal year for which funding has not been appropriated or otherwise made available.

17. **PAYMENT:** Payment in advance is prohibited under this Contract. Payment may only be made after the delivery and acceptance of goods or services. The Vendor shall submit invoices, in arrears, to the Agency at the address on the face of the purchase order labeled "Invoice To."

18. **UNIT PRICE:** Unit prices shall prevail in cases of a discrepancy in the Vendor's bid.

19. **DELIVERY:** All quotations are considered freight on board destination ("F.O.B. destination") unless alternate shipping terms are clearly identified in the bid. Vendor's listing of shipping terms that contradict the shipping terms expressly required by this Solicitation may result in bid disqualification.

20. **INTEREST:** Interest attributable to late payment will only be permitted if authorized by the West Virginia Code. Presently, there is no provision in the law for interest on late payments.

21. **PREFERENCE:** Vendor Preference may only be granted upon written request and only in accordance with the West Virginia Code § 5A-3-37 and the West Virginia Code of State Rules. A Resident Vendor Certification form has been attached hereto to allow Vendor to apply for the preference. Vendor's

failure to submit the Resident Vendor Certification form with its bid will result in denial of Vendor Preference. Vendor Preference does not apply to construction projects.

22. **SMALL, WOMEN-OWNED, OR MINORITY-OWNED BUSINESSES:** For any solicitations publicly advertised for bid on or after July 1, 2012, in accordance with West Virginia Code §5A-3-37(a)(7) and W. Va. CSR § 148-22-9, any non-resident vendor certified as a small, women-owned, or minority-owned business under W. Va. CSR § 148-22-9 shall be provided the same preference made available to any resident vendor. Any non-resident small, women-owned, or minority-owned business must identify itself as such in writing, must submit that writing to the Purchasing Division with its bid, and must be properly certified under W. Va. CSR § 148-22-9 prior to submission of its bid to receive the preferences made available to resident vendors. Preference for a non-resident small, women-owned, or minority owned business shall be applied in accordance with W. Va. CSR § 148-22-9.

23. **TAXES:** The Vendor shall pay any applicable sales, use, personal property or any other taxes arising out of this Contract and the transactions contemplated thereby. The State of West Virginia is exempt from federal and state taxes and will not pay or reimburse such taxes.

24. **CANCELLATION:** The Purchasing Division Director reserves the right to cancel this Contract immediately upon written notice to the vendor if the materials or workmanship supplied do not conform to the specifications contained in the Contract. The Purchasing Division Director may cancel any purchase or Contract upon 30 days written notice to the Vendor in accordance with West Virginia Code of State Rules § 148-1-7.16.2.

25. **WAIVER OF MINOR IRREGULARITIES:** The Director reserves the right to waive minor irregularities in bids or specifications in accordance with West Virginia Code of State Rules § 148-1-4.6.

26. **TIME:** Time is of the essence with regard to all matters of time and performance in this Contract.

27. **APPLICABLE LAW:** This Contract is governed by and interpreted under West Virginia law without giving effect to its choice of law principles. Any information provided in specification manuals, or any other source, verbal or written, which contradicts or violates the West Virginia Constitution, West Virginia Code or West Virginia Code of State Rules is void and of no effect.

28. **COMPLIANCE:** Vendor shall comply with all applicable federal, state, and local laws, regulations and ordinances. By submitting a bid, Vendors acknowledge that they have reviewed, understand, and will comply with all applicable law.

29. **PREVAILING WAGE:** On any contract for the construction of a public improvement, Vendor and any subcontractors utilized by Vendor shall pay a rate or rates of wages which shall not be less than the fair minimum rate or rates of wages (prevailing wage), as established by the West Virginia Division of Labor under West Virginia Code §§ 21-5A-1 et seq. and available at http://www.sos.wv.gov/administrative-law/wagerates/Pages/default.aspx. Vendor shall be responsible for ensuring compliance with prevailing wage requirements and determining when prevailing wage

requirements are applicable. The required contract provisions contained in West Virginia Code of State Rules § 42-7-3 are specifically incorporated herein by reference.

30. **ARBITRATION:** Any references made to arbitration contained in this Contract, Vendor's bid, or in any American Institute of Architects documents pertaining to this Contract are hereby deleted, void, and of no effect.

31. **MODIFICATIONS:** This writing is the parties' final expression of intent. Notwithstanding anything contained in this Contract to the contrary, no modification of this Contract shall be binding without mutual written consent of the Agency, and the Vendor, with approval of the Purchasing Division and the Attorney General's office (Attorney General approval is as to form only). **No Change shall be implemented by the Vendor until such time as the Vendor receives an approved written change order from the Purchasing Division.**

32. **WAIVER:** The failure of either party to insist upon a strict performance of any of the terms or provision of this Contract, or to exercise any option, right, or remedy herein contained, shall not be construed as a waiver or a relinquishment for the future of such term, provision, option, right, or remedy, but the same shall continue in full force and effect. Any waiver must be expressly stated in writing and signed by the waiving party.

33. **SUBSEQUENT FORMS:** The terms and conditions contained in this Contract shall supersede any and all subsequent terms and conditions which may appear on any form documents submitted by Vendor to the Agency or Purchasing Division such as price lists, order forms, invoices, sales agreements, or maintenance agreements, and includes internet websites or other electronic documents. Acceptance or use of Vendor's forms does not constitute acceptance of the terms and conditions contained thereon.

34. **ASSIGNMENT:** Neither this Contract nor any monies due, or to become due hereunder, may be assigned by the Vendor without the express written consent of the Agency, the Purchasing Division, the Attorney General's office (as to form only), and any other government agency or office that may be required to approve such assignments. Notwithstanding the foregoing, Purchasing Division approval may or may not be required on certain agency delegated or exempt purchases.

35. **WARRANTY:** The Vendor expressly warrants that the goods and/or services covered by this Contract will: (a) conform to the specifications, drawings, samples, or other description furnished or specified by the Agency; (b) be merchantable and fit for the purpose intended; and (c) be free from defect in material and workmanship.

36. **STATE EMPLOYEES:** State employees are not permitted to utilize this Contract for personal use and the Vendor is prohibited from permitting or facilitating the same.

37. **BANKRUPTCY:** In the event the Vendor files for bankruptcy protection, the State of West Virginia may deem this Contract null and void, and terminate this Contract without notice.

38. [RESERVED]

39. **CONFIDENTIALITY**: The Vendor agrees that it will not disclose to anyone, directly or indirectly, any such personally identifiable information or other confidential information gained from the Agency, unless the individual who is the subject of the information consents to the disclosure in writing or the disclosure is made pursuant to the Agency's policies, procedures, and rules. Vendor further agrees to comply with the Confidentiality Policies and Information Security Accountability Requirements, set forth in http://www.state.wv.us/admin/purchase/privacy/default.html.

40. **DISCLOSURE:** Vendor's response to the Solicitation and the resulting Contract are considered public documents and will be disclosed to the public in accordance with the laws, rules, and policies governing the West Virginia Purchasing Division. Those laws include, but are not limited to, the Freedom of Information Act found in West Virginia Code § 29B-1-1 et seq.

If a Vendor considers any part of its bid to be exempt from public disclosure, Vendor must so indicate by specifically identifying the exempt information, identifying the exemption that applies, providing a detailed justification for the exemption, segregating the exempt information from the general bid information, and submitting the exempt information as part of its bid but in a segregated and clearly identifiable format. Failure to comply with the foregoing requirements will result in public disclosure of the Vendor's bid without further notice. A Vendor's act of marking all or nearly all of its bid as exempt is not sufficient to avoid disclosure and WILL NOT BE HONORED. Vendor's act of marking a bid or any part thereof as "confidential" or "proprietary" is not sufficient to avoid disclosure and WILL NOT BE HONORED. In addition, a legend or other statement indicating that all or substantially all of the bid is exempt from disclosure is not sufficient to avoid disclosure and WILL NOT BE HONORED. Vendor will be required to defend any claimed exemption for nondisclosure in the event of an administrative or judicial challenge to the State's nondisclosure. Vendor must indemnify the State for any costs incurred related to any exemptions claimed by Vendor. Any questions regarding the applicability of the various public records laws should be addressed to your own legal counsel prior to bid submission.

41. **LICENSING:** In accordance with West Virginia Code of State Rules §148-1-6.1.7, Vendor must be licensed and in good standing in accordance with any and all state and local laws and requirements by any state or local agency of West Virginia, including, but not limited to, the West Virginia Secretary of State's Office, the West Virginia Tax Department, West Virginia Insurance Commission, or any other state agency or political subdivision. Upon request, the Vendor must provide all necessary releases to obtain information to enable the Purchasing Division Director or the Agency to verify that the Vendor is licensed and in good standing with the above entities.

42. **ANTITRUST:** In submitting a bid to, signing a contract with, or accepting a Purchase Order from any agency of the State of West Virginia, the Vendor agrees to convey, sell, assign, or transfer to the State of West Virginia all rights, title, and interest in and to all causes of action it may now or hereafter acquire under the antitrust laws of the United States and the State of West Virginia for price fixing and/or unreasonable restraints of trade relating to the particular commodities or services purchased or acquired by the State of West Virginia. Such assignment shall be made and become effective at the time the

purchasing agency tenders the initial payment to Vendor.

43. **VENDOR CERTIFICATIONS:** By signing its bid or entering into this Contract, Vendor certifies (1) that its bid was made without prior understanding, agreement, or connection with any corporation, firm, limited liability company, partnership, person or entity submitting a bid for the same material, supplies, equipment or services; (2) that its bid is in all respects fair and without collusion or fraud; (3) that this Contract is accepted or entered into without any prior understanding, agreement, or connection to any other entity that could be considered a violation of law; and (4) that it has reviewed this RFQ in its entirety; understands the requirements, terms and conditions, and other information contained herein. Vendor's signature on its bid also affirms that neither it nor its representatives have any interest, nor shall acquire any interest, direct or indirect, which would compromise the performance of its services hereunder. Any such interests shall be promptly presented in detail to the Agency.

The individual signing this bid on behalf of Vendor certifies that he or she is authorized by the Vendor to execute this bid or any documents related thereto on Vendor's behalf; that he or she is authorized to bind the Vendor in a contractual relationship; and that, to the best of his or her knowledge, the Vendor has properly registered with any State agency that may require registration.

44. **PURCHASING CARD ACCEPTANCE:** The State of West Virginia currently utilizes a Purchasing Card program, administered under contract by a banking institution, to process payment for goods and services. The Vendor must accept the State of West Virginia's Purchasing Card for payment of all orders under this Contract unless the box below is checked.

☑ Vendor is not required to accept the State of West Virginia's Purchasing Card as payment for all goods and services.

45. **VENDOR RELATIONSHIP:** The relationship of the Vendor to the State shall be that of an independent contractor and no principal-agent relationship or employer-employee relationship is contemplated or created by this Contract. The Vendor as an independent contractor is solely liable for the acts and omissions of its employees and agents. Vendor shall be responsible for selecting,

supervising, and compensating any and all individuals employed pursuant to the terms of this Solicitation and resulting contract. Neither the Vendor, nor any employees or subcontractors of the Vendor, shall be deemed to be employees of the State for any purpose whatsoever. Vendor shall be exclusively responsible for payment of employees and contractors for all wages and salaries, taxes, withholding payments, penalties, fees, fringe benefits, professional liability insurance premiums, contributions to insurance and pension, or other deferred compensation plans, including but not limited to, Workers' Compensation and Social Security obligations, licensing fees, *etc.* and the filing of all necessary documents, forms and returns pertinent to all of the foregoing. Vendor shall hold harmless the State, and shall provide the State and Agency with a defense against any and all claims including, but not limited to, the foregoing payments, withholdings, contributions, taxes, Social Security taxes, and employer income tax returns.

46. **INDEMNIFICATION:** The Vendor agrees to indemnify, defend, and hold harmless the State and the Agency, their officers, and employees from and against: (1) Any claims or losses for services rendered

by any subcontractor, person, or firm performing or supplying services, materials, or supplies in connection with the performance of the Contract; (2) Any claims or losses resulting to any person or entity injured or damaged by the Vendor, its officers, employees, or subcontractors by the publication, translation, reproduction, delivery, performance, use, or disposition of any data used under the Contract in a manner not authorized by the Contract, or by Federal or State statutes or regulations; and (3) Any failure of the Vendor, its officers, employees, or subcontractors to observe State and Federal laws including, but not limited to, labor and wage and hour laws.

47. **PURCHASING AFFIDAVIT:** In accordance with West Virginia Code § 5A-3-10a, all Vendors are required to sign, notarize, and submit the Purchasing Affidavit stating that neither the Vendor nor a related party owe a debt to the State in excess of $1,000. The affidavit must be submitted prior to award, but should be submitted with the Vendor's bid. A copy of the Purchasing Affidavit is included herewith.

48. **ADDITIONAL AGENCY AND LOCAL GOVERNMENT USE:** This Contract may be utilized by and extends to other agencies, spending units, and political subdivisions of the State of West Virginia; county, municipal, and other local government bodies; and school districts ("Other Government Entities"). This Contract shall be extended to the aforementioned Other Government Entities on the same prices, terms, and conditions as those offered and agreed to in this Contract. If the Vendor does not wish to extend the prices, terms, and conditions of its bid and subsequent contract to the Other Government Entities, the Vendor must clearly indicate such refusal in its bid. A refusal to extend this Contract to the Other Government Entities shall not impact or influence the award of this Contract in any manner.

49. **CONFLICT OF INTEREST:** Vendor, its officers or members or employees, shall not presently have or acquire any interest, direct or indirect, which would conflict with or compromise the performance of its obligations hereunder. Vendor shall periodically inquire of its officers, members and employees to ensure that a conflict of interest does not arise. Any conflict of interest discovered shall be promptly presented in detail to the Agency.

50. **REPORTS:** Vendor shall provide the Agency and/or the Purchasing Division with the following reports identified by a checked box below:

☑ Such reports as the Agency and/or the Purchasing Division may request. Requested reports may include, but are not limited to, quantities purchased, agencies utilizing the contract, total contract expenditures by agency, etc.

☐ Quarterly reports detailing the total quantity of purchases in units and dollars, along with a listing of purchases by agency. Quarterly reports should be delivered to the Purchasing Division via email at purchasing.requisitions@wv.gov.

51. **BACKGROUND CHECK:** In accordance with W. Va. Code § 15-2D-3, the Director of the Division of Protective Services shall require any service provider whose employees are regularly employed on the grounds or in the buildings of the Capitol complex or who have access to sensitive or critical information to submit to a fingerprint-based state and federal background inquiry through the state

repository. The service provider is responsible for any costs associated with the fingerprint-based state and federal background inquiry.

After the contract for such services has been approved, but before any such employees are permitted to be on the grounds or in the buildings of the Capitol complex or have access to sensitive or critical information, the service provider shall submit a list of all persons who will be physically present and working at the Capitol complex to the Director of the Division of Protective Services for purposes of verifying compliance with this provision.

The State reserves the right to prohibit a service provider's employees from accessing sensitive or critical information or to be present at the Capitol complex based upon results addressed from a criminal background check.

Service providers should contact the West Virginia Division of Protective Services by phone at (304) 558-9911 for more information.

52. **PREFERENCE FOR USE OF DOMESTIC STEEL PRODUCTS:** Except when authorized by the Director of the Purchasing Division pursuant to W. Va. Code § 5A-3-56, no contractor may use or supply steel products for a State Contract Project other than those steel products made in the United States. A contractor who uses steel products in violation of this section may be subject to civil penalties pursuant to W. Va. Code § 5A-3-56. As used in this section:

a. "State Contract Project" means any erection or construction of, or any addition to, alteration of or other improvement to any building or structure, including, but not limited to, roads or highways, or the installation of any heating or cooling or ventilating plants or other equipment, or the supply of and materials for such projects, pursuant to a contract with the State of West Virginia for which bids were solicited on or after June 6, 2001.

b. "Steel Products" means products rolled, formed, shaped, drawn, extruded, forged, cast, fabricated or otherwise similarly processed, or processed by a combination of two or more or

such operations, from steel made by the open heath, basic oxygen, electric furnace, Bessemer or other steel making process.

The Purchasing Division Director may, in writing, authorize the use of foreign steel products if:

a. The cost for each contract item used does not exceed one tenth of one percent (.1%) of the total contract cost or two thousand five hundred dollars ($2,500.00), whichever is greater. For the purposes of this section, the cost is the value of the steel product as delivered to the project; or

b. The Director of the Purchasing Division determines that specified steel materials are not produced in the United States in sufficient quantity or otherwise are not reasonably available to meet contract requirements.

53. **PREFERENCE FOR USE OF DOMESTIC ALUMINUM, GLASS, AND STEEL:** In Accordance

with W. Va. Code § 5-19-1 et seq., and W. Va. CSR § 148-10-1 et seq., for every contract or subcontract, subject to the limitations contained herein, for the construction, reconstruction, alteration, repair, improvement or maintenance of public works or for the purchase of any item of machinery or equipment to be used at sites of public works, only domestic aluminum, glass or steel products shall be supplied unless the spending officer determines, in writing, after the receipt of offers or bids, (1) that the cost of domestic aluminum, glass or steel products is unreasonable or inconsistent with the public interest of the State of West Virginia, (2) that domestic aluminum, glass or steel products are not produced in sufficient quantities to meet the contract requirements, or (3) the available domestic aluminum, glass, or steel do not meet the contract specifications. This provision only applies to public works contracts awarded in an amount more than fifty thousand dollars ($50,000) or public works contracts that require more than ten thousand pounds of steel products.

The cost of domestic aluminum, glass, or steel products may be unreasonable if the cost is more than twenty percent (20%) of the bid or offered price for foreign made aluminum, glass, or steel products. If the domestic aluminum, glass or steel products to be supplied or produced in a "substantial labor surplus area", as defined by the United States Department of Labor, the cost of domestic aluminum, glass, or steel products may be unreasonable if the cost is more than thirty percent (30%) of the bid or offered price for foreign made aluminum, glass, or steel products.

This preference shall be applied to an item of machinery or equipment, as indicated above, when the item is a single unit of equipment or machinery manufactured primarily of aluminum, glass or steel, is part of a public works contract and has the sole purpose or of being a permanent part of a single public works project. This provision does not apply to equipment or machinery purchased by a spending unit for use by that spending unit and not as part of a single public works project.

All bids and offers including domestic aluminum, glass or steel products that exceed bid or offer prices including foreign aluminum, glass or steel products after application of the preferences provided in this provision may be reduced to a price equal to or lower than the lowest bid or offer price for foreign aluminum, glass or steel products plus the applicable preference. If the reduced bid or offer prices are made in writing and supersede the prior bid or offer prices, all bids or offers, including the reduced bid or offer prices, will be reevaluated in accordance with this rule.

e UPS Store #5761
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Suite 115
Virginia Beach, VA. 23456
Phone: 757-430-6300
Fax: 757-430-6222

FAX

To	Connie Oswald	From	Deloitte/Phil Bonowitz
Company	Department of Education/WV	Phone number	973 602 5311
Fax number	304.558.2157	Fax number	908 803 0123
Date	10/9/13	Total pages	22

As per phone conversation with Don Parr, attached please find Deloitte Consulting LLP's signed Addendum 3 to be included with our bid for proposal RFP# EDD398772.

10/10/13 01:57:25 PM
West Virginia Purchasing Division

ADDENDUM ACKNOWLEDGEMENT FORM
SOLICITATION NO.: EDD398772

Instructions: Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge addenda may result in bid disqualification.

Acknowledgment: I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

Addendum Numbers Received:
(Check the box next to each addendum received)

[X]	Addendum No. 1	[ ]	Addendum No. 6
[X]	Addendum No. 2	[ ]	Addendum No. 7
[X]	Addendum No. 3	[ ]	Addendum No. 8
[ ]	Addendum No. 4	[ ]	Addendum No. 9
[ ]	Addendum No. 5	[ ]	Addendum No. 10

I understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information issued in writing and added to the specifications by an official addendum is binding.

Deloitte Consulting LLP
Company

Authorized Signature

October 9, 2013
Date

NOTE: This addendum acknowledgement should be submitted with the bid to expedite document processing.