U.S. Department of Education

Washington, D.C. 20202-5335

APPLICATION FOR GRANTS UNDER THE

STATEWIDE LONGITUDINAL DATA SYSTEM RECOVERY ACT GRANTS
CFDA # 84.384A
PR/Award # R384A100012

Closing Date: NOV 19, 2009

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Application for Federal Assistance SF-424 Version 02

* 1. Type of Submission	* 2. Type of Application:	* If Revision, select appropriate letter(s):
[ ] Preapplication	[X] New	
[X] Application	[ ] Continuation	* Other (Specify)
[ ] Changed/Corrected Application	[ ] Revision	

* 3. Date Received:	4. Applicant Identifier:
12/1/2009	

5a. Federal Entity Identifier:	* 5b. Federal Award Identifier:
	NA

State Use Only:

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

8. APPLICANT INFORMATION:

* a. Legal Name: North Dakota Department of Public Instruction

* b. Employer/Taxpayer Identification Number (EIN/TIN):	* c. Organizational DUNS:
456002426	803755057

d. Address:

* Street1:	600 E. Boulevard Ave, Dept 201
Street2:	
* City:	Bismarck
County:	
State:	ND
Province:	
* Country:	USA
* Zip / Postal Code:	58505

e. Organizational Unit:

Department Name:	Division Name:
North Dakota Department of Public Instruction	Adminstrative Services

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

Prefix:	Mr.	* First Name:	Frank
Middle Name:	S		

* Last Name:	Snow		
Suffix:			
Title:	Director, Management of Information Systems		
Organizational Affiliation: North Dakota Department of Public Instruction			
* Telephone Number:	(701)328-2189	Fax Number:	(701)328-2255
* Email:	FSNOW@ND.GOV		

Application for Federal Assistance SF-424 Version 02

9. Type of Applicant 1: Select Applicant Type:

A: State Government

Type of Applicant 2: Select Applicant Type:

Type of Applicant 3: Select Applicant Type:

* Other (specify):

10. Name of Federal Agency:

U.S. Department of Education

11. Catalog of Federal Domestic Assistance Number:

84.384A

CFDA Title:

Statewide Longitudinal Data System Recovery Act Grants

*** 12. Funding Opportunity Number:**

ED-GRANTS-072909-000

Title:

Statewide Longitudinal Data System Recovery Act Grant

13. Competition Identification Number:

Title:

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

multi-agency, statewide

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

ND is seeking federal funding to expand current efforts to plan, design, develop and implement a statewide LDS. The system will link records between K12, Early Childhood, Higher Education and WorkForce and provide information back to stakeholders.

Attach supporting documents as specified in agency instructions.

Attachment:
Title :
File :

Attachment:
Title :
File :

Attachment:
Title :
File :

Application for Federal Assistance SF-424 Version 02

16. Congressional Districts Of:
* a. Applicant: ND-All * b. Program/Project: ND-All

Attach an additional list of Program/Project Congressional Districts if needed.
Attachment:
Title :
File :

17. Proposed Project:
* a. Start Date: 4/1/2010 * b. End Date: 3/31/2013

18. Estimated Funding ($):

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

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

[ ] a. This application was made available to the State under the Executive Order 12372 Process for review on .
[X] b. Program is subject to E.O. 12372 but has not been selected by the State for review.
[ ] c. Program is not covered by E.O. 12372.

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

[ ] Yes [X] No

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

[X] ** I AGREE

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

Authorized Representative:

Prefix:	Mr.	* First Name:	Frank
Middle Name:	S		
* Last Name:	Snow		
Suffix:			

Title:	Director, Management of Information Systems

* Telephone Number:	(701)328-2189	Fax Number:	(701)328-2255

* Email:	FSNOW@ND.GOV

* Signature of Authorized Representative:	* Date Signed:

Application for Federal Assistance SF-424 Version 02

*** Applicant Federal Debt Delinquency Explanation**

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

U.S. DEPARTMENT OF EDUCATION

BUDGET INFORMATION

NON-CONSTRUCTION PROGRAMS

OMB Control Number: 1894-0008

Expiration Date: 02/28/2011

Name of Institution/Organization:
North Dakota Department of Publi...

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

SECTION A - BUDGET SUMMARY

U.S. DEPARTMENT OF EDUCATION FUNDS

Budget Categories	Project Year 1(a)	Project Year 2 (b)	Project Year 3 (c)	Project Year 4 (d)	Project Year 5 (e)	Total (f)
1. Personnel	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0
2. Fringe Benefits	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0
3. Travel	$ 13,620	$ 13,620	$ 13,620	$ 0	$ 0	$ 40,860
4. Equipment	$ 2,447,936	$ 808,705	$ 429,865	$ 0	$ 0	$ 3,686,506
5. Supplies	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0
6. Contractual	$ 2,630,208	$ 2,562,164	$ 1,916,982	$ 0	$ 0	$ 7,109,354
7. Construction	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0
8. Other	$ 25,000	$ 0	$ 0	$ 0	$ 0	$ 25,000
9. Total Direct Costs (lines 1-8)	$ 5,116,764	$ 3,384,489	$ 2,360,467	$ 0	$ 0	$ 10,861,720
10. Indirect Costs*	$ 398,742	$ 249,216	$ 171,505	$ 0	$ 0	$ 819,463
11. Training Stipends	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0
12. Total Costs (lines 9-11)	$ 5,515,506	$ 3,633,705	$ 2,531,972	$ 0	$ 0	$ 11,681,183

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

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

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

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

Period Covered by the Indirect Cost Rate Agreement: From: 7/1/2008 To: 6/30/2011 (mm/dd/yyyy)

Approving Federal agency: [X] ED [ ] Other (please specify): _____ The Indirect Cost Rate is 12%

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

[ ] Is included in your approved Indirect Cost Rate Agreement? or, [ ] Complies with 34 CFR 76.564(c)(2)? The Restricted Indirect Cost Rate is 0%

ED Form No. 524

U.S. DEPARTMENT OF EDUCATION

BUDGET INFORMATION

NON-CONSTRUCTION PROGRAMS

OMB Control Number: 1894-0008

Expiration Date: 02/28/2011

Name of Institution/Organization:
North Dakota Department of Publi...

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

SECTION B - BUDGET SUMMARY

NON-FEDERAL FUNDS

Budget Categories	Project Year 1(a)	Project Year 2 (b)	Project Year 3 (c)	Project Year 4 (d)	Project Year 5 (e)	Total (f)
1. Personnel	$ 199,543	$ 199,543	$ 199,543	$ 0	$ 0	$ 598,629
2. Fringe Benefits	$ 39,742	$ 39,742	$ 39,742	$ 0	$ 0	$ 119,226
3. Travel	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0
4. Equipment	$ 263,200	$ 411,400	$ 0	$ 0	$ 0	$ 674,600
5. Supplies	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0
6. Contractual	$ 11,990	$ 13,200	$ 13,200	$ 0	$ 0	$ 38,390
7. Construction	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0
8. Other	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0
9. Total Direct Costs (lines 1-8)	$ 514,475	$ 663,885	$ 252,485	$ 0	$ 0	$ 1,430,845
10. Indirect Costs	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0
11. Training Stipends	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0
12. Total Costs (lines 9-11)	$ 514,475	$ 663,885	$ 252,485	$ 0	$ 0	$ 1,430,845

ASSURANCES - NON-CONSTRUCTION PROGRAMS

Standard Form 424B (Rev.7-97)

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

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

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

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

1. Has the legal authority to apply for Federal assistance, and the institutional, managerial and financial capability (including funds sufficient to pay the non-Federal share of project cost) to ensure proper planning, management, and completion of the project described in this application.

2. Will give the awarding agency, the Comptroller General of the United States, and if appropriate, the State, through any authorized representative, access to and the right to examine all records, books, papers, or documents related to the award; and will establish a proper accounting system in accordance with generally accepted accounting standards or agency directives.

3. Will establish safeguards to prohibit employees from using their positions for a purpose that constitutes or presents the appearance of personal or organizational conflict of interest, or personal gain.

4. Will initiate and complete the work within the applicable time frame after receipt of approval of the awarding agency.

5. Will comply with the Intergovernmental Personnel Act of 1970 (42 U.S.C. "4728-4763) relating to prescribed standards for merit systems for programs funded under one of the 19 statutes or regulations specified in Appendix A of OPM's Standards for a Merit System of Personnel Administration (5 C.F.R. 900, Subpart F).

6. Will comply with all Federal statutes relating to nondiscrimination. These include but are not limited to: (a) Title VI of the Civil Rights Act of 1964 (P.L. 88-352) which prohibits discrimination on the basis of race, color or national origin; (b) Title IX of the Education Amendments of 1972, as amended (20 U.S.C. "1681-1683, and 1685-1686), which prohibits discrimination on the basis of sex; (c) Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. '794), which prohibits discrimination on the basis of handicaps; (d) the Age Discrimination Act

9. Will comply, as applicable, with the provisions of the Davis-Bacon Act (40 U.S.C. "276a to 276a-7), the Copeland Act (40 U.S.C. '276c and 18 U.S.C. "874) and the Contract Work Hours and Safety Standards Act (40 U.S.C. " 327-333), regarding labor standards for federally assisted construction sub-agreements.

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

11. Will comply with environmental standards which may be prescribed pursuant to the following: (a) institution of environmental quality control measures under the National Environmental Policy Act of 1969 (P.L. 91-190) and Executive Order (EO) 11514; (b) notification of violating facilities pursuant to EO 11738; (c) protection of wetlands pursuant to EO 11990; (d) evaluation of flood hazards in floodplains in accordance with EO 11988; (e) assurance of project consistency with the approved State management program developed under the Coastal Zone Management Act of 1972 (16 U.S.C. "1451 et seq.); (f) conformity of Federal actions to State (Clear Air) Implementation Plans under Section 176(c) of the Clear Air Act of 1955, as amended (42 U.S.C. "7401 et seq.); (g) protection of underground sources of drinking water under the Safe Drinking Water Act of 1974, as amended, (P.L. 93-523); and (h) protection of endangered species under the Endangered Species Act of 1973, as amended, (P.L. 93-205).

12. Will comply with the Wild and Scenic Rivers Act of 1968 (16 U.S.C. "1721 et seq.) related to protecting components or potential components of the national wild and scenic rivers system.

13. Will assist the awarding agency in assuring compliance

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

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

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

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

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

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

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

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

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

Signature of Authorized Certifying Representative:
Name of Authorized Certifying Representative: Wayne G. Sanstead
Title: State Superintendent
Date Submitted: 10/19/2009

Approved by OMB 0348-0046 Exp.

Disclosure of Lobbying Activities

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

1. Type of Federal Action:	**2. Status of Federal Action:**	**3. Report Type:**
[ ] Contract [X] Grant [ ] Cooperative Agreement [ ] Loan [ ] Loan Guarantee [ ] Loan Insurance	[ ] Bid/Offer/Application [X] Initial Award [ ] Post-Award	[ ] Initial Filing [ ] Material Change **For Material Change only:** Year: 0Quarter: 0 Date of Last Report:
4. Name and Address of Reporting Entity: [ ] Prime [ ] Subawardee Tier, if known: 0 Name: Address: City: State: Zip Code + 4: - **Congressional District, if known:**	**5. If Reporting Entity in No. 4 is a Subawardee, Enter Name and Address of Prime:** Name: Address: City: State: Zip Code + 4: - **Congressional District,** if known:	
6. Federal Department/Agency:	**7. Federal Program Name/Description:** CFDA Number, if applicable:	
8. Federal Action Number, if known:	**9. Award Amount,** if known: $0	
10. a. Name of Lobbying Registrant (if individual, last name, first name, MI): Address: City: State: Zip Code + 4: -	**b. Individuals Performing Services** (including address if different from No. 10a) (last name, first name, MI): Address: City: State: Zip Code + 4: -	
11. Information requested through this form is authorized by title 31 U.S.C. section 1352. This disclosure of lobbying activities is a material representation of fact upon which reliance was placed by the tier above when this transaction was made or entered into. This disclosure is required pursuant to 31 U.S.C. 1352. This information will be reported to the Congress semi-annually and will be available for public inspection. Any person who fails to file the required disclosure shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.	Name: Wayne G. Sanstead Title: State Superintendent Applicant: North Dakota Department of Public Instruction Date: 10/19/2009	
Federal Use Only:		Authorized for Local Reproduction Standard Form LLL (Rev. 7-97)

CERTIFICATION REGARDING LOBBYING

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

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

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

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

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

Statement for Loan Guarantees and Loan Insurance.

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

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

APPLICANT'S ORGANIZATION	
North Dakota Department of Public Instruction	
PRINTED NAME AND TITLE OF AUTHORIZED REPRESENTATIVE	
Prefix: Dr First Name: Wayne	Middle Name: G
Last Name: Sanstead	Suffix:
Title: State Superintendent	
Signature: _____	Date: 10/19/2009

ED 80-0013 03/04

SUPPLEMENTAL INFORMATION REQUIRED FOR DEPARTMENT OF EDUCATION GRANTS

1. Project Director:

Prefix:	* First Name:	Middle Name:	* Last Name:	Suffix:
Mr.	Frank	S	Snow	

Address:

* Street1: 600 E. Boulevard Ave., Dept. 201

Street2:

* City: Bismarck

County:

* State: ND* Zip / Postal Code: 58505 * Country: **USA**

* Phone Number (give area code)	Fax Number (give area code)
(701)328-2189	(701)328-2189

Email Address:

FSNOW@ND.GOV

2. Applicant Experience

Novice Applicant [ ] Yes [X] No [ ] Not applicable

3. Human Subjects Research

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

[ ] Yes [X] No

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

[ ] Yes Provide Exemption(s) #:

[ ] No Provide Assurance #, if available:

Please attach an explanation Narrative:

Attachment:
Title :
File :

Project Narrative

Project Narrative - Project Abstract

Attachment 1:
Title: **ND SLDS Grant Abstract Final** Pages: **1** Uploaded File: **C:\Documents and Settings\fsnow\Desktop\Grant Submission\ND SLDS grant abstract final .pdf**

5. Project Abstract: ND EdSmart Data System

North Dakota proposes to build a state longitudinal data system (SLDS) to enhance its ability to provide accountability reporting to leaders and stakeholders.This initiative, named ND EdSmart, provides the planning, development, and coordination efforts that are required to realize a data repository that unifies key data from public PK-12, higher education, and workforce development initiatives and provides the analytical insight to ensure that students transition successfully from K-12 to higher education and the workforce and to foster educational improvement statewide.

The EdSmart data system – a powerful combination of an easy-to-use business intelligence tool and a state data warehouse populated with select data from multiple agencies—will empower and enlighten state leaders by providing answers to questions that are essential for meeting North Dakota's education and workforce goals. Outcomes of this initiative include:

1. A SLDS data warehouse incorporating metrics from K-12, postsecondary and workforce will be implemented
2. A secure, robust system will be in production to link records based on standards for exchanging data
3. A robust business intelligence system will be in place for developing and publishing reports
4. The SLDS Committee and key stakeholders will be trained
5. A data quality process will be in place
6. Automated systems will be in place to capture source data

The ND EdSmart data system will build on the capabilities of the K-12 data system currently being implemented in North Dakota. ND EdSmart will meet the required capabilities and elements not met by that K-12 system.

As part of the project, data linkages will be built to identify teachers with the postsecondary program where they received their degree to correlate with teacher-student outcomes. Linkages between K-12 and post secondary records will provide information about the preparation for and transition to college. Data linkages will also be established to link K-12 and post secondary students (graduates and drop outs) to employment records and the military. Pre-K to K-12 linkages will also be built.

Major activities in the project will be the design and development of the SLDS. Major components of the system will be a data warehouse, a "master data management" solution to link records, and a business intelligence system to produce reports. Broad training programs will be implemented so that key stakeholders are skilled at data governance as well as using the data. A process for validating and continuous auditing of the data will be developed so that match rates can be improved and confidence in the data can be assured. In addition,improvements will be made to source systems in local districts, the Center for Distance Education, and the North Dakota University System, to facilitate the sharing of information.

Project Narrative

Project Narrative - Project Narrative

Attachment 1:
Title: **ND SLDS Grant Narrative** Pages: **30** Uploaded File: **C:\Documents and Settings\fsnow\Desktop\Grant Submission\ND SLDS grant narrative.pdf**

Narrative: ND EdSmart Data System

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6. Project Narrative:

6. (a) Need for project

The State of North Dakota is working towards the goals of improving student achievement in K-12 schools and ensuring that K-12 students transfer successfully from K-12 to postsecondary education and the workforce. To that end, the State is requesting this grant in order to deploy the technical infrastructure for a State Longitudinal Data System - the North Dakota EdSmart Data System. Today the State has limited capabilities for analyzing student outcomes over time, using systems running on inadequate technology. In addition, stakeholders need training in governance and data quality processes to have consistent, reliable information for analysis. Significant work is also needed to implement automated systems to capture source data for the North Dakota Center for Distance Education, Pre-K programs, K-12 school districts, postsecondary and workforce programs.

Background / Current Status

The State of North Dakota has already initiated a number of programs that can contribute toward achieving the goal of providing comprehensive, statewide, P-20 longitudinal data reporting and analysis.

- The State of North Dakota has established a multi-agency Statewide Longitudinal Data System (SLDS) Committee that is responsible for the establishment and ongoing management of data governance standards and practices. This is an important step in gaining the requisite participation of state departments and agencies, establishing priorities and setting direction so that the SLDS goals can be successfully attained. The legislation regarding the SLDS Committee and its membership is found in Appendix A.

- The State of North Dakota Department of Public Instruction (DPI) applied for and received a $6.7 million grant award to meet the demands of K-12 longitudinal reporting via the ndSLEDS project. The State has established a standard for deploying a Student Information System (SIS) with the PowerSchool application to collect data at the local level. That application is already in production at a number of the State's schools and the State is committed to full implementation in all schools by 2014. However, the State determined that this needs to be accelerated. Data from the individual school SIS applications is consolidated in the State Automated Reporting System (STARS). At present, schools that are not yet live on PowerSchool enter data directly into STARS, effectively attempting to use that application to accomplish some of the tasks of a full-featured SIS.

- The State has experience linking educational and workforce data with the current Follow-up Information on North Dakota Education and Training (FINDET) System. While the FINDET technical architecture needs to be replaced, the state agencies involved with FINDET have experience working

together that will be leveraged when implementing ND EdSmart, the new SLDS.

- The North Dakota University System, made up of the eleven state colleges and universities, has a single student information system and is currently implementing a data warehouse to capture postsecondary data for reporting purposes.

Current State and Local Data Systems

North Dakota prides itself on creating and maintaining an accountability system that meets the federal reporting requirements of ED*Facts* and the Family Educational Rights and Privacy Act (FERPA). North Dakota has invested over $3 million in developing its statewide data collection systems. DPI began building an online system, the State Automated Reporting System (STARS) for collecting data to meet No Child Left Behind (NCLB) requirements and establishing a state student identifier. STARS also provides the data collection and calculations required for State Foundation Aid. The online collection system has been rewritten to meet heightened data needs as demands for data required by the Education Data Exchange Network (EDEN)/ ED*Facts*, technology standards and data quality issues have increased.

The second generation STARS, upgraded in 2008, expands the state collection system in program areas to meet more ED*Facts* requirements and increase data validations and quality enhancements to improve the data. STARS has created a strong foundation to build on as North Dakota moves toward collecting the data elements and quality audits needed to provide a robust collection system for a statewide longitudinal data system.

The State hosts PowerSchool, a student information system, for local districts and is piloting automated reporting from PowerSchool to STARS. In 2009, the Legislature mandated that all school districts use PowerSchool as the State standard. Until that time it was voluntary. However, the Legislature did not fund adequate resources to implement PowerSchool in less than five years. Having the same student information system across the State will facilitate the adoption of standard interfaces and data collections.

Via the PowerSchool SIS and STARS application, the State of North Dakota has established a strong foundation for K-12 reporting by establishing standards for reporting key fields of entities such as School, Student, Teacher, and Course in order to provide the basis for reporting and analysis of metrics related to major events such as student enrollment, transfer, withdrawal, testing, graduation, and disciplinary action. Full adoption of PowerSchool by all North Dakota primary and secondary schools will improve data consistency and is key to integration.

In 2009, DPI received an SLDS grant from IES to develop the North Dakota Statewide Educational Longitudinal Data System (ndSLEDS). The ndSLEDS project is focused on building a state K-12 data warehouse and reporting system, with limited data exchanges with other partners. It does provide for the collection of student level test scores and

assessment data, linking students to teachers and the collection of identifying information to link K-12 information to post secondary. Appendix C indicates the current status of the requirements and also those that are being addressed by the ndSLEDS project. The ndSLEDS data warehouse will serve as the primary K-12 source for the proposed ND EdSmart data system. The outcomes identified in this grant application will build on the work done in the ndSLEDS project by enhancing the linkages with postsecondary, workforce and Pre-K.

The North Dakota University System (NDUS) has implemented ConnectND, a common SIS based on Oracle's PeopleSoft Campus Solutions application. This has enabled NDUS to assign and manage unique IDs for students systemwide. NDUS has successfully completed a pilot to match K-12 data supplied by DPI with student data managed by NDUS' ConnectND student system. The pilot has proven the feasibility of achieving a high degree of match (approximately 80% success rate) in order to align the statewide K-12 student ID with the ConnectND student ID. The state will seek to employ more sophisticated matching techniques and algorithms to achieve higher match rates through the policies and data quality efforts proposed in this project and the ndSLEDS project. The data sharing agreement between DPI and NDUS that governs this current cooperative effort is found in Appendix A.

NDUS also captures student profile data, including Social Security Number, from the ACT performance assessment and from student enrollment/registration demographic information. This places NDUS in the position of being able to provide the means of linking students at the secondary and postsecondary levels with workforce.

Further, NDUS has licensed and, in 2009, will begin implementing a data warehousing and business intelligence system that will enable data from all NDUS colleges and universities to be loaded into a common repository that will serve as the primary Higher Ed source for the proposed ND EdSmart data system. The three modules chosen for the current implementation focus on enrolled students, their financial information and employees of the NDUS. In order to fulfill the data requirements associated with the grant proposal it is essential that NDUS also implements the Student Admissions and Recruitment Module.

While NDUS captures all students taking classes for credit, they do not have a standard solution for capturing students in non-credit workforce training programs. The North Dakota Workforce Training System (TrainND) provides business and industry specific training. Currently there is not a standard application nor data definitions for the data collected through TrainND throughout North Dakota. Implementation of a common system could provide North Dakota with another data source to create metrics regarding educational preparation.

Job Service North Dakota operates the Unemployment Insurance (UI) program for the State. The UI operational system runs on a 30 year old mainframe. UI data is downloaded to a personal computer where a single individual is responsible for developing and running reports using FoxPro. Wage data records are keyed by SSN but

demographic data such as name, gender, birth date, etc. are not collected on a consistent basis making linkage to K-12 records difficult.

Current data exchange system

The current system for exchanging data across agencies is called FINDET or Follow-up Information on North Dakota Education and Training. FINDET is administered by the NDUS through a state agency steering committee formed to provide information regarding the status of graduates and program completers of North Dakota educational programs. FINDET was originally modeled after Florida's program and has been in place for more than 15 years. Many of the reports that are provided by FINDET are required by state or federal law. FINDET has two research analyst positions responsible for collecting the data and creating the reports. The system runs on a standalone computer and is highly dependent on the availability and knowledge of the limited staff that understand its operation.

FINDET uses two primary sources of data to "find" students. The first is the PeopleSoft student information system used by all eleven institutions of North Dakota University System (NDUS). Enrollment and graduation data is extracted for each fall and spring semester. The other primary data source is the Unemployment Insurance (UI) information from Job Service. This data is used to match students to employment and wages in North Dakota

Other agencies can supply data to FINDET to match against the NDUS and UI data. Follow-up reports are provided back to the agency at a summary level without personally identifiable information. FINDET reports, including longitudinal data studies, are reported in aggregate form to state agencies in full compliance with all state and federal regulations regarding privacy information, including FERPA, HIPPA, and CIPSEA.

In the 2007 session, the legislature created the State Longitudinal Data System Committee and asked it to study the issue and create a recommendation regarding the long term role of FINDET, as well as plan for an SLDS, the North Dakota EdSmart data system, incorporating educational and workforce data. The State hired Claraview to develop a roadmap which has become the basis for moving forward. Claraview recommended replacing FINDET with a robust SLDS system. The SLDS Committee recognized that getting a K-12 longitudinal system in place and developing an NDUS data warehouse were necessary first steps in evolving from FINDET into a more robust system. The State began working toward designing and implementing a K-12 SLDS system (the ndSLEDS project) with 2009 IES SLDS grant funds and is using State resources to begin implementing the NDUS data warehouse.

Need for the Project / Gaps

While North Dakota has made some progress toward building an SLDS, gaps remain before it can produce the type of reporting and analysis necessary to promote improvements in student outcomes. Appendix C identifies the status of each requirement identified in the RFA. With this grant, North Dakota plans to address five of the seven capabilities and six of the twelve elements prescribed by the America

Competes Act. Once this project is complete, North Dakota will have addressed all the requirements to a large extent. The EdSmart data system will also address the second requirement of the State Fiscal Stabilization Fund: Establishing Pre-K-to college and career data systems that track progress and foster continuous improvement.

The following table summarizes the gaps that exist related to requirements.

Requirements (7 System Capabilities)	**Needs / Gaps**
The system must enable States to examine student progress and outcomes over time, including students' preparation to meet the demands of postsecondary education, the 21st century workforce, and the Armed Forces. Such a system must include data at the individual student level from preschool through postsecondary education and into the workforce (e.g., employment, wage, and earnings information).	The current FINDET system was established in 1995 specifically for the purpose of following postsecondary students into the workforce. Since 1995, FINDET has provided a statistical analysis and reporting mechanism with limited capability to examine student progress and outcomes over time. The FINDET system does not have a data warehouse for storing and reporting longitudinal data. The disaster recovery capability is limited. Security is based on limiting physical access to one or two people. DPI will build a data warehouse for K-12 purposes as part of the ndSLEDs project and NDUS will implement a data warehouse for higher education purposes. North Dakota needs an-SLDS data warehouse to extend the K-12 and higher education data warehouses to capture additional information about Pre-K, workforce and transition metrics.
The system must facilitate and enable the exchange of data among agencies and institutions within the State and between States so that data may be used to inform policy and practice. Such a system would support interoperability by using standard data structures, data formats, and data definitions to ensure linkage and connectivity among the various levels and types of data.	FINDET reporting is generally limited to what is required by State and federal law. There is no capability for anyone other than FINDET staff to generate reports for analysis. Little information makes its way back to school districts where it could impact classroom practices. Data exchanges are not standardized or documented in a consistent manner. Data exchanges with Pre-K programs have not been established. The ndSLEDS project will prepare the K-12 data warehouse to accept postsecondary and UI data but additional work is needed to enhance postsecondary and UI systems to provide quality data. Several additional gaps exist with regard to exchange of data capabilities between agencies, institutions, and interstate data exchange. Resolution of field data definitions across agencies is an ongoing process that must be completed before an SLDS reporting system can become functional. Additional work is needed to

	develop meaningful data sharing agreements and establish consistent data standards.
The system must link student data with teachers, i.e., it must enable the matching of teachers and students so that a given student may be matched with the particular teachers primarily responsible for providing instruction in various subjects.	This requirement will be met by the ndSLEDS project and is not addressed by this grant application.
The system must enable the matching of teachers with information about their certification and teacher preparation programs, including the institutions at which teachers received their training.	No data exists today that matches teachers with information about teacher preparation programs. The ndSLEDS project will match student data with the teacher but it does not extend to teacher background information. Data linkages and exchanges need to be established to match teachers to their preparation program.
The system must enable data to be easily generated for continuous improvement and decision-making, including timely reporting to parents, teachers, and school leaders on the achievement of their students.	Many but not all school districts use PowerSchool student information system to communicate with parents about individual students. The ndSLEDS project will establish a business intelligence system for reporting K-12 state level data to stakeholders. No business intelligence tool exists for easily generating reports for stakeholders of metrics about the transition between educational systems and the workforce. The PowerSchool student information system needs to be implemented on an accelerated schedule to have statewide data available for linking. The North Dakota Center for Distance Education also needs an automated student information system to capture student data and provide information to stakeholders. The ndSLEDS project will deploy a business intelligence tool for generating reports for stakeholders of K-12 educational systems. To be able to combine data mining with sophisticated offline analysis to create research studies capable of influencing data driven decisions regarding program quality and improvement, North Dakota needs to extend the implementation of a BI tool to the multi-agency data in the ND EdSmart data system.
The system must ensure the quality and integrity of data	The FINDET system does not have a mechanism for providing stakeholders information about the quality of

contained in the system.	their data or the match rate. While a steering committee is in place, the ability to create and maintain standards, establish data quality processes and use data to inform policy is lacking. Ongoing experience with enterprise level educational data systems in North Dakota has identified significant issues yet to be resolved regarding data quality and integrity. For instance, operators and programmers of systems currently in use cannot easily identify and rectify data quality issues because they are not visible to the operators, and data cannot be easily sub-summarized for contextual view and visualization. Missing field data, data that do not comply with field definitions and other issues are difficult to correct except on individual records. Stakeholders need to be trained in data governance and data quality. A policy manual needs to be developed to formalize the decisions of the SLDS Committee.
The system must provide the State with the ability to meet reporting requirements of the Department, especially reporting progress on the metrics established for the State Fiscal Stabilization Fund and the reporting requirements included in the *EDFacts* data collection and reporting system.	This requirement has been met by DPI and is not addressed by this grant application.

Requirements (12 Data Elements)	**Needs / Gaps**
A unique statewide student identifier that does not permit a student to be individually identified by users of the system (except as allowed by Federal and State law)	This requirement has been met by DPI and is not addressed by this grant application.
Student-level enrollment, demographic, and program participation information	Data for students in educational programs is captured except for Pre-K students. Data exchanges for Pre-K students need to be designed and developed as part of the ND EdSmart data system.
Student-level information about the points at which	Data for students that enter and exit educational programs is captured except for Pre-K students. Data

students exit, transfer in, transfer out, drop out, or complete P-16 education programs	exchanges for Pre-K students need to be designed and developed as part of the ND EdSmart data system.
The capacity to communicate with higher education data systems	The FINDET system is based on ad-hoc extracts supplied by NDUS. Only Career and Technical Education students are matched to post secondary data. The ndSLEDS project will identify the fields necessary for matching student records and prepare the K-12 data warehouse to accept data. Additional work is necessary to enhance the higher education data systems to provide quality data. Most of this work will be advanced through the initial data warehouse efforts of the NDUS and those additions needed to provide data for the SLDS through this grant.
A State data audit system assessing data quality, validity, and reliability	The FINDET system does not have a mechanism for providing stakeholders information about the quality of their data or the match rate. Data audits need to be done to assess data quality and make improvements. Reports need to be developed to provide feedback to source data providers and an ongoing training program needs to be established to raise awareness of data quality issues.
Yearly test records of individual students with respect to assessments under section 1111(b) of the Elementary and Secondary Education Act of 1965	This requirement will be met by the ndSLEDS project and is not addressed by this grant application.
Information on students not tested, by grade and subject	This requirement will be met by the ndSLEDS project and is not addressed by this grant application.
A teacher identifier system with the ability to match teachers to students	This requirement will be met by the ndSLEDS project and is not addressed by this grant application.
Student-level transcript information, including information on courses completed and grades earned	This requirement will be met by the ndSLEDS project and is not addressed by this grant application.
Student-level college readiness test scores	This requirement will be met by the ndSLEDS project and is not addressed by this grant application. Since the ndSLEDS project, the North Dakota legislature created a requirement for ACT and / or Workkeys test data.

Data that provide information regarding the extent to which students transition successfully from secondary school to postsecondary education, including whether students enroll in remedial coursework	North Dakota has not established metrics that indicate successful transition or created a definition for remedial coursework. Hence, only anecdotal information is available today. Standard data definitions need to be developed as well as reports showing information about students transitioning to postsecondary education.
Data that provide other information determined necessary to address alignment and adequate preparation for success in postsecondary education	K-12 student information including course taking and test scores will be available as a result of the ndSLEDS project. The ND EdSmart project will leverage these metrics, including ACT and Workkeys scores, as indicators of K-12 preparation. Reports correlating K-12 student information with postsecondary success do not exist and need to be developed.

6. (b) Outcomes

Outcomes Aligned with Requirements

North Dakota has identified six major outcomes to be accomplished with funding from this grant.

1. A SLDS data warehouse incorporating metrics from K-12, postsecondary and workforce will be implemented
2. A secure, robust system will be in production to link records based on standards for exchanging data
3. A robust business intelligence system will be in place for developing and publishing reports
4. The SLDS Committee and key stakeholders will be trained
5. A data quality process will be in place
6. Automated systems will be in place to capture source data

The first three outcomes establish a robust, sustainable infrastructure for linking data and reporting education and workforce metrics to stakeholders. The chart in Appendix A shows a conceptual model of the ND EdSmart data system architecture. The fourth outcome will be delivery of a training program to governance committees and stakeholders to ensure well thought-out policies are in place and stakeholders know how to use data to inform educational improvement decisions. The fifth outcome will establish a data audit process to ensure that data quality continues to improve over time. To ensure that student data is collected efficiently, automated systems will be implemented statewide as the sixth outcome.

The six outcomes are interrelated and dependent upon each other. The end result, once all six outcomes are achieved, is that North Dakota will have a comprehensive P-20 system in place that permits the generation and use of accurate and timely data, supports analysis and provides for informed decision-making at all levels of the

education system. It will also increase the efficiency with which data may be analyzed to support the continuous improvement of education services and outcomes, facilitate research to improve student academic achievement and close achievement gaps, support education accountability systems, and simplify the processes used by State educational agencies to make education data transparent through Federal and public reporting.

The chart in Appendix C summarizes the outcomes and their relationship to the requirements of the RFA. The six major outcomes include a number of intermediate outcomes. These outcomes also align with the needs identified for each requirement in the table above.

Outcomes Detail

Outcome 1: 1. The ND EdSmart data warehouse incorporating metrics from Pre-K,K-12, postsecondary and workforce
Other Outcomes: • Completion of a UI data mart • Postsecondary transition metrics defined and captured in the SLDS data warehouse • Postsecondary preparation and outcome metrics defined and captured in the ND EdSmart data warehouse

A key component of the ND EdSmart data system architecture will be a data warehouse that can easily manage data. P-20 individual record data will be integrated in a data warehouse that facilitates research and longitudinal data access. As part of this grant, North Dakota will extend the data modeling work being done in the ndSLEDS project to capture the additional data elements. Integration of ndSLEDS data and student records data from NDUS will serve as a foundation for the proposed EdSmart project. As part of the ND EdSmart data system, the state intends to deploy a robust P-20 SLDS data warehouse that will provide the foundation for disaggregated reporting and detailed analysis of education and training performance and effectiveness for appropriate education administrators.

In addition to educational data sources, the project will include activities to identify and incorporate data from early childhood and Pre-K programs as well as workforce data from the Commerce Department, the Department of Human Services and most importantly JSND UI data. Common accountability measures are required and have been developed for twenty workforce training programs. Data required for these accountability measures is not stored in a data warehouse today. As part of the ND EdSmart project it will be uploaded to the ND EdSmart system and made available for longitudinal analysis.

Data that is captured from Pre-K, K-12, post secondary programs and workforce programs will be loaded through extract, transform and load (ETL) processes to ensure

data integrity and consistency. Secure access will be provided based on user profiles and data will be structured to facilitate reporting and analytical requirements.

Activities involved in deploying the ND EdSmart data warehouse will be the design of the data warehouse, including the incorporation of a UI data mart, the development of the data warehouse, data conversion, testing, implementing, and training users. ETL design and development activities will also be included.

As part of designing the data warehouse, decisions will need to be made about the metrics to be included. Activities will involve defining the metrics and ensuring that the data is available from source systems. Of particular importance will be the inclusion of metrics regarding the preparation for and transition to postsecondary. K-12 test scores will be captured as part of the ndSLEDS project and correlated with postsecondary data in the ND EdSmart project. Committees are already in place looking at improving the transition from K-12 to postsecondary. As stakeholders who will be analyzing the data, they will be heavily involved in the development of these metrics.

Outcome 2: 2. A secure, robust system in production to link records based on standards for exchanging data
Other Outcomes: • Documented standards for the exchanging data • Reports showing metrics about the correlation of teacher preparation programs to student outcomes • A system in place for linking data about students as they transition from Pre-K to K-12 education • A system in place for linking data about students as they transition from K-12 to postsecondary

Another key component of the ND EdSmart data system architecture is the Master Data Management (MDM) solution, a tool used to track students entering and leaving the ND EdSmart data system through numerous feeder systems and applications. MDM will provide consolidation, cleansing, governance, and standards-based, secure data sharing on individuals throughout their interactions with the P-20 application systems.

With a statewide MDM solution, we will be able to:

- Unify data about an individual consistently across state's systems to form a complete accurate profile
- Provide for entity resolution across all systems to create a master record in the ND EdSmart data system along with a cross-reference of the IDs found in the source systems.
- Track the relationships of an individual with the participating agencies and identify and view the source of the data in the master data management system
- Provide sophisticated matching algorithms and postal address validation.
- Distribute constituent data to all subscribing systems that are interested in updates to core data

- Support batch and publish/subscribe interfaces to maintain consistent data in real time

The MDM repository will be critical to our ability to integrate constituent data as individuals transition between various systems that record the attributes essential to this P-20 project.

Implementing the technology is only part of the work involved however. Other activities include developing and documenting standards for exchanging data, defining the business rules for linking the data and testing the exchanges.

As part of the ND EdSmart project, North Dakota will develop linkages between Pre-K and K-12 students, K-12 and postsecondary students, all students and workforce (UI) data, and K-12 teachers and their postsecondary preparation programs.

To develop linkages between teachers and their preparation programs, data will be captured by the Education and Standards Board when teachers apply for licensure. This will make it possible to link to data captured by NDUS about the teacher preparation programs. This data will also be linked to data that DPI captures about teacher course assignments and from there to student data - creating a rich body of information for analysis.

To develop linkages between early childhood programs and later K-20 outcomes, effort will be needed to identify processes for collecting data and to establish meaningful metrics and reports.DPI and the ND Department of Human Services (DHS) which administers IDEA Part C, Temporary Aid to needy Families (TANF) and Food Stamps (FS) have jointly implemented a Master Data Management (MDM) Entity Resolution (ER) system for matching TANF and FS school aged children to LEA enrolled students to determine FDA free-lunch eligibility. This system will be used to identify children receiving early intervention services through IDEA part C and register them in STARS assigning a state student ID number to allow for the longitudinal linkage as the child transitions through other early childhood programs such as Head Start through the enrollment of IDEA part B and into the LEA.

In addition, the North Dakota State Administrator of Head Start Collaboration Office and the directors of North Dakota Head Start Programs and Early Head Start Programs are familiar with the state longitudinal efforts and are proactively seeking relationships with the LEA and SEA to determine measurable outcomes of their programs and meeting statewide school readiness initiatives. This grant will provide the ability to link data about ND Head Start children by expanding the SEA State Automated Reporting System (STARS) to include Early Head Start and Head Start programs in North Dakota. STARS will allow the programs to:

- Register all children and assign a state student ID (ND Head Start programs are familiar with the SEA STARS and state-wide Individual Education Plan (IEP) system TIENET due to their cooperative work with ND special education units).

The registration will provide the longitudinal linkage that is fundamental to the ND EdSmart data system.

- Head Start program directors will determine a core set of data to be commonly collected throughout the state and reported through STARS which will allow for the secure record exchange of this data as students move between Head Start programs and the data necessary to transition into preschool and primary school settings. An important measurement to be captured is IEPs that are dismissed by the time the student transitions into primary education. Additionally a study to align Pre-K assessments will be performed to provide recommendations on a standardized assessment capable of providing the readiness measures for kindergarten.

While the ndSLEDS project provides for linking higher education with K-12 data, more work is needed on the higher education side to modify their systems to collect key fields and improve the quality of the data and the match rate. With regard to UI data, again, the ndSLEDS project will prepare the K-12 system but more work is needed to enhance the UI data system to improve the match rate by using other linkages to build more comprehensive index data. Once fully deployed, the functionality of FINDET, North Dakota's 15 year-old application for managing a database for employment and training, will be replaced by the EdSmart data system.

Outcome 3: 3. A robust business intelligence system in place for developing and publishing reports
Other Outcomes: • Produce reports currently delivered by FINDET • Additional reports addressing the transition through the educational systems and into the workforce.

The third architectural component necessary for the ND EdSmart data system is the implementation of an enterprise reporting solution with access via a web portal. To support our overall goal of improving student achievement and ensuring a successful transition to college and the workforce, North Dakota stakeholders and decision makers will be provided with comprehensive analyses on a continuous basis. Reporting developed as part of the EdSmart data system will focus on metrics developed from linkages between systems. Web based and paper reports will deliver information to teachers, administrators, parents, legislators and other stakeholders so that they can make informed decisions to improve the educational system. A BI system gives users, within their security limitations, the ability to generate ad hoc reports, create charts, and further analyze the data. Role based security will be implemented to ensure that all state and federal privacy and confidentiality regulations are followed regarding the treatment of personal information. Activities necessary to deploy a business intelligence system include selecting, implementing, and testing the system as well as training users.

While each agency that interacts with ND EdSmart data may require unique output formats, the BI toolset is flexible enough to ensure that the data exchanged with that organization is seamless. We expect that we will deliver data via dashboards, portals, email, Microsoft Office suite and the usual paper format.

We plan to provide an extensive metadata repository for the BI consumers to leverage to understand the metrics and attributes being presented in reports, and that the information available from the BI tool will be the data relevant to their role and job title.

At a minimum, this project will also include activities to reproduce the reports currently generated by the FINDET system. Additional reports will be created to show the correlation between early childhood programs and later education outcomes. Metrics about the correlation between teacher preparation programs and student outcomes as well as metrics regarding the transition to postsecondary and the workforce will also be reported.

Outcome 4: 4. The SLDS Committee and key stakeholders will be trained
Other Outcomes: • Delivery of data governance training to key stakeholders • Development of a policy manual

It is critical that the ND EdSmart data system be managed by a knowledgeable team of decision makers and that stakeholders throughout the data collection and reporting process understand their role. North Dakota will contract with a vendor to develop and deliver training to the governance committees so that they can govern effectively. In addition, the contractor will facilitate the development of a policy manual so that the committee can experience the act of data governance under the guidance of a knowledgeable expert. The policy manual will encompass standards for the exchange of data between agencies and policies to ensure the privacy and security of data.

Training will occur in two tiers:

- **Strategic Training** – This will focus on high level policy makers. It will examine what is already in place: governance, stewardship, privacy laws and regulations, change control, architectures, quality programs, access management practices, and more -- then introduce governance approaches that will be effective without adding layers of bureaucracy.
- **Traditional Governance Training** – This will focus on direct data mangers and data stewards. It will examine concepts, models, patterns, and practices of industry standard data governance. It will focus on organizational structures, scope decisions and terminologies.

The training/mentoring topics will include the following topics:

- Core Data Governance and Stewardship concepts
    - Options for data governance/stewardship organizational bodies

    - Designing roles, responsibilities, and decision rights for data governance/stewardship
    - Creating a roadmap for a data governance/stewardship program
    - Understanding governance/ stewardship industry trends
- Demonstrating Value
    - Understanding governance/ stewardship value propositions
    - Establishing/improving governance communications
    - Governance metrics and success measures
- Core Governance Processes and Activities
    - Standardizing data definitions
    - Aligning data governance, taxonomies, and information architecture
    - Using the metadata repository to store risk, compliance, and governance information
    - Setting up a help desk for data
- Aligning Governance with Other Efforts
    - Building aligned data governance and data quality programs
    - Aligning data governance, risk management, compliance, security, and privacy programs
    - Building aligned data governance and data quality programs
    - Designing data governance to support master data management and Service Oriented Architecture
    - Building governance into software development and project management

Outcome 5: 5. A data quality process will be in place
Other Outcomes: • Exception reporting process implemented • Audit conducted on existing data to identify improvement efforts • Delivery of data quality training to key stakeholders

For the ND EdSmart data system to become a trusted tool for making educational improvement decisions, the information provided must be reliable, consistent and verifiable. North Dakota will develop a data audit process and put it into operation on an ongoing basis. A key feature of this process will be exception reports to give feedback to source data providers so that they can improve their own processes.

Initially, an audit will be conducted on existing data to identify improvement areas to be addressed. This information will be used to clean up source data that may be converted as the data warehouse is built. It will also be used to improve processes for capturing the data.

Training will also be delivered to all providers of source data and data "handlers" so that they understand the importance of their role in maintaining the confidentiality as well as the quality of the data. Source data providers include local school districts, higher education institutions, and workforce programs among others. Data handlers include anyone who has access to the data from the point it is collected until it is reported. For

example, school administrators, ND EdSmart system administrators, and research analysts, to name a few, are all people who contribute to the success of the project.

Outcome 6: 6. Automated systems will be in place to capture source data
Other Outcomes: • Implementation of a web-based Virtual School Management System for North Dakota Center for Distance Education (ND CDE) • Accelerated implementation of PowerSchool student information system in all schools in North Dakota • Implementation of a system to capture workforce training offered through state colleges and universities • Implementation of an additional NDUS data warehouse module

In order to capture data at the source automated systems are necessary. Then the data can be exchanged with other systems following the standards developed by the State. Two K-12 student data collection and reporting gaps will be filled using funds from the ND EdSmart project ARRA grant once the following outcomes are achieved:

1. Implementation of a web-based virtual school management system for the North Dakota Center for Distance Education (ND CDE) and
2. Accelerated implementation of PowerSchool student information system in all schools in North Dakota.

Additional work is also needed in the area of higher education data collection and reporting systems. North Dakota proposes two projects to enhance the capacity to communicate with higher education data systems:

1. Implementation of a system to capture workforce training offered through state colleges and universities and
2. Implementation of an additional NDUS data warehouse module.

Web-based Virtual School Management System for ND CDE

The ND CDE is North Dakota's online high school. ND CDE enrolls 4,200 students each year from 48 states and 30 foreign countries. 1,400 of those enrollments are North Dakota students. Most of those ND students take one or two courses through ND CDE because either the course is not available through the local school or they need the credits to graduate. ND CDE interactions with its students are complex, involving initial online contacts with prospective students and their parents, course enrollment, materials purchase and payment processes, online teaching and learning interactions with ND CDE teachers and staff, online notifications of student progress, course completion/graduation processes, and student data collection and reporting.

ND CDE is regularly required to report data about their students to entities in multiple states:

1. Local schools – the home schools of the ND CDE students,
2. State education agencies including ND DPI,

3. Home-school associations,
4. Transcripts to public and private colleges and universities nationwide,
5. The U.S. military,
6. Social Security Administration,
7. Job Service, and
8. Public and private employers nationwide.

Currently ND CDE collects, stores, and reports student data using a patchwork of legacy systems based on database solutions customized on an ad hoc basis over the last 13 years. The data and other business demands on online schools are increasing and ever-changing. ND CDE needs a new foundation for their business model in order to meet those demands.

ND CDE proposes to move to a new web-based virtual school management system that is based on current technology and makes the collection and reporting of student information more efficient, effective and secure. ND CDE proposes to implement a customized virtual school management system based on .net or similar technology. The new system will allow ND CDE to meet the increased demands for secure, accurate and timely reporting of data on its students to multiple agencies within North Dakota (using existing state-level unique student identifiers) and out of state. The new system will integrate seamlessly with ND CDE's course delivery system and provide better access by parents, school officials, state entities and other external stakeholders.

Accelerated Implementation of PowerSchool and LDS Training for P-12 Schools
A critical source of data for DPI's ndSLEDS and the proposed ND EdSmart data system is the student data generated in local schools. North Dakota established PowerSchool as its statewide student information system for all public schools in 2009. To complete implementation of PowerSchool in all schools with funding that is currently available will take over four years. The state legislature provided funding for PowerSchool implementation staff, but in order to begin meeting the mandates of ARRA and the new requirements of the U.S. Department of Education we propose accelerating that implementation timeline.

To accelerate the implementation of PowerSchool in all the remaining schools in the state, we request ARRA grant funding for two additional implementation staff for three years. This will reduce implementation time by over a year. With the additional temporary staff, all North Dakota schools will be using PowerSchool before end of 2011.

In addition to basic implementation of the statewide student information system, these grant funded staff will be transitioned into training positions to assist schools in analyzing data from the new ND EdSmart data system to improve student results.

Implementation and Hosting of a Workforce Training (TrainND) and Reporting System for Non-Credit Activities
In reviewing the data needs for a Statewide Longitudinal Data System for education that collects data from relevant sectors and provides feedback to K-12 (DPI), a significant

missing piece is the standardized collection of data for non-credit work through TrainND for workforce development.

The North Dakota Workforce Training System (TrainND) provides business and industry with the training their employees need to enhance productivity and competitiveness in today's fast changing economy. Currently there is not a standard application nor data definitions for the data collected through TrainND throughout North Dakota. This proposal will provide for the acquisition, implementation, software, and operational training of a standard application and collection of source data to feed the ND EdSmart data system.

An application system will be acquired and implemented that will meet the following general requirements:

- Allow the TrainND operational units and the other institutions of the North Dakota University System to manage and administer their workforce training, workforce development, and related learning activities;
- Handle all logistics for managing and administering training activities, including courses, sessions, instructors, registrations, transcripts, and reporting;
- Facilitate displaying offerings on the web, as well as handle secure registrations of participants on the web;
- Interface with the NDUS Oracle Peoplesoft student application for credit work, NDUS supported learning management system, and NDUS supported collaborative learning technology;
- Ability for each institution to have their own reporting and for the NDUS to pull global data; and
- Provide for data collection consistency and ability to export data to the SLDS.

Without the implementation of a consistent application across the workforce development learning areas, it is unlikely data will be available to the ND EdSmart data system in a manner that allows for the analysis with other sectors of the educational community providing data.

Admissions and Recruitment Data Warehouse Module
The North Dakota University System, consisting of eleven institutions, is implementing three modules of Oracle's Campus Solutions Data Warehouse to compliment its current Oracle Peoplesoft application products for Student, Finance, and Human Resources and Management Systems. In addition, it has licensed some Oracle Business Intelligence tools for internal use.

The Campus Solutions data warehouse initiative was undertaken to address the need to analyze, measure, and report on its students, employees, and financial data in a timely manner. The pressure on public higher education to respond to demands from internal, regulatory, external, and financing stakeholders that want better insight into the operational aspects of the University System required a different approach to storing

and mining data. The Campus Solutions Warehouse will allow the NDUS to capture data in a single environment.

The three modules prioritized for the current implementation are the Student Records Mart, Student Financials Mart, and Workforce Profile Mart. All three of these modules focus on enrolled students, their financial information and employees of the NDUS. In order to fulfill the data requirements associated with the grant proposal it is essential that the NDUS also implement the Student Admissions & Recruitment Module.

The Student Admissions and Recruiting Mart records information from the recruiting process and admissions lifecycle through to enrollment. Many students apply to multiple institutions and also many never enroll at any institution in the NDUS. This module will allow the admissions data and recruiting data to be captured in the warehouse where selected information can then be shared with the ND EdSmart data system. This module includes high school information such as institution, GPA and core courses taken, test scores, and converted GPA's. It also includes transfer information similar to the high school information that can be used to help trace a student's entire record from K-12 to higher education and even multiple higher education institutions.

In order to facilitate access to this information the NDUS will also need to expand the licensing for Business Intelligence software tools, add hardware and disk storage to accommodate the Admissions and Recruitment Mart, and obtain consulting assistance with the mart implementation.

NDUS has the licensing rights to the Admissions and Recruitment Mart but does not have any source of funding for implementation or expansion of the data warehouse effort beyond current planned efforts. Using grant funds to add this mart of the data warehouse will provide a complete data picture for students of the NDUS and data can then be shared, as provided in appropriate data-sharing agreements, through the ND EdSmart data system to stakeholders state-wide.

6. (c) Timeline for Project Outcomes

The following section identifies the activities and timelines proposed for the EdSmart project. The project plan for this project will be closely coordinated with the ndSLEDS project (2009 grant). Key project team members will participate in both projects, including the project manager and data architect. Activities in the ndSLEDS project related to procurement of technical infrastructure and tools will be leveraged in the EdSmart project to reduce cost and standardize the architecture. The project will begin as soon as funds are available and will be completed in three years.

1. The ND EdSmart data system incorporating metrics from K-12, postsecondary and workforce will be implemented.

Activity	Year 1				Year 2				Year 3			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Develop RFP	X											
Procure software, and		X										

consulting												
Develop architecture requirements		X										
Evaluate hardware options and design configuration		X										
Procure & install hardware			X									
Gather data requirements			X									
Define key metrics			X	X								
Develop data model and design ETL processes				X	X							
Create ETL processes						X	X	X				
Cleanse & load data							X	X	X			
Test & refine								X	X			
Move to production										X		
Establish access controls										X	X	

2. A secure, robust system will be in production to link records based on standards for exchanging data.

Activity	Year 1				Year 2				Year 3			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Develop RFP	X											
Procure software, hardware and consulting		X										
Install hardware			X									
Train users			X									
Develop data model and business rules for linkages			X	X	X							
Modify STARS to collect Pre-K data				X								
Implement Pre-K data collection and train users					X							
Enumerate					X	X						

postsecondary												
Enumerate Pre-K						X	X					
Enumerate workforce						X	X					
Test MDM solution						X	X	X	X			
Move to production									X	X		

3. A robust business intelligence system will be in place for developing and publishing reports.

Activity	Year 1				Year 2				Year 3			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Develop RFP	X											
Procure software, hardware and consulting		X										
Implement BI tool			X									
Train users				X	X							
Refine reporting requirements					X	X	X	X				
Develop & test FINDET reports									X	X		
Develop & test K-12 to postsecondary transition reports										X	X	X
Develop & test reports regarding teacher prep programs										X	X	
Develop & test Pre-K outcome reports											X	X
Develop & test UI & workforce reports										X	X	X

4. The SLDS Committee and key stakeholders will be trained.

Activity	Year 1				Year 2				Year 3			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Develop RFP and procure consulting	X											
Deliver governance training		X	X						X			
Mentor SLDS Committee			X	X	X	X	X	X				

Develop policy manual			X	X	X	X	X	X				
Develop data sharing agreements				X	X	X	X					
Maintain governance processes									X	X	X	X

5. A data quality process will be in place.

Activity	Year 1				Year 2				Year 3			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Procure and install data quality tools	X	X										
Develop RFP and procure consulting	X											
Conduct audit of current data		X										
Identify requirements			X	X								
Establish data quality process					X	X	X					
Design and develop validation reporting							X	X	X			
Test and implement the data quality process and reports									X	X	X	X

6. Automated systems will be in place to capture source data.

Activity	Year 1				Year 2				Year 3			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Develop RFP for ND CDE SMS	X											
Procure software, hardware and consulting		X										
Install hardware, software			X									
Develop ND CDE SMS			X	X	X	X						
Test and implement ND CDE SMS							X	X				
Train SMS users								X	X			
Develop linkage to SMS									X	X	X	
Hire FTEs for accelerated PowerSchool implementation	X											

Implement PowerSchool	X	X	X	X	X	X	X	X	X	X	X	X
Develop RFP for Workforce Training System (WTS)	X	X										
Procure software, hardware and consulting			X									
Implement WTS				X	X	X						
Train WTS users						X	X					
Roll out WTS							X	X				
Develop linkage to WTS		X				X			X	X		
Procure hardware, software and consulting for Admission & Recruiting Data Mart (ARDM)	X											
Procure hardware and software for BI tool	X											
Complete ARDM requirements gap analysis		X										
Develop ARDM custom extensions		X	X									
Generate ETL			X	X								
Load and cleanse ARDM data				X	X							
Develop reports						X	X	X				
Test system					X	X						
Move ARDM system to production							X					
Create linkage from ARDM to ND EdSmart			X				X	X				

6. (d) Project Management and Governance Plan

Overview

North Dakota Century Code requires all projects of this size follow the state standards on project management based on the Project Management Institute's Project Management Book Of Knowledge (PMBOK). Additionally the size of this project requires Large Project Oversight, a formal process for reporting on projects over $250,000. The Legislative Information Technology Committee monitors projects on a quarterly basis. Vendors and contractors who participate in the project are required to utilize this common framework of project management which has resulted in many successful projects in North Dakota.

ITD will prepare the project management plan using the following organizational structure and responsibilities:

Project Sponsor
Lisa Feldner, State CIO will serve as the ND EdSmart Project Sponsor, and will be responsible for securing the funding and human resources to design, implement, and sustain the project. The Project Sponsor must consider for approval all actions affecting budget, scope, schedule, and quality that are escalated with recommendations by the Project Manager (PM). Based upon the input of the Project Team, the Project Manager (PM), and the Executive Steering Committee, the Project Sponsor will provide final sign-off on any escalated change.

Executive Steering Committee
Governance of the ND EdSmart data system will be the responsibility of the Statewide Longitudinal Data System Committee. This is a legislatively mandated committee and is comprised of representatives of key stakeholder organizations including Department of Public Instruction (DPI), Information Technology Department (ITD), Job Service North Dakota (JSND), North Dakota University System (NDUS), Commerce Department, Education Technology Council (ETC), Career and Technical Education (CTE), Department of Human Services (DHS), North Dakota Council of Educational Leaders (NDCEL), Director of the North Dakota Workforce Development and two state legislators. Because this is a multi-agency project, the SLDS Committee will play a key role in approving project documents and deliverables. The PM will meet with this committee at least quarterly to convey status of the project, outstanding issues, budget information and escalation of project issues or risks. A meeting of the SLDS Committee can be requested at any time by the PM or any member of the committee.

Project Manager
The Project Manager (PM) will hold a Project Management Professional certificate and have experience in similar sized projects. The PM is responsible for ensuring that the Project Team completes the project. The PM develops the project plan with the team and manages the team's performance of project tasks. It is also the PM's responsibility to secure acceptance and approval of deliverables from the Project Sponsor and stakeholders. The management controls developed and monitored by the PM will encompass: Cost, Scope, Schedule, and Quality Management (CSSQ). Formal processes of managing the CSSQ include: Integrated Changed Control, Human Resource Management, Communications Management, Risk Management and Procurement Management.

Project Business Case, Charter and Plan
A business case and project charter shall be developed and executed to initiate the project and to secure commitment for the resources (human, financial, equipment, etc.) necessary for the project. The Project Sponsor shall formally approve the project charter based on agreement of the SLDS Committee. A project plan shall be developed as the primary planning document for the project. The project plan shall follow PMBOK guidelines, and the guidelines of the North Dakota Project Management Guidebook and Project Plan Template.

Project Team

The ND EdSmart Project Team is the group that is responsible for planning and executing the project. It consists of the PM and a variable number of Project Team members who are brought in to deliver their tasks according to the project schedule. Permanent team members will include the Project Manager; Steve Snow, DPI Project Liaison; Tracy Korsmo, Technical Architect; Dan Pullen, Director, Education Technology Council; and Mick Pytlik, NDUS Project Liaison.

DPI Project Liaison

Steve Snow, DPI, a key member of the project team, will act as liaison to DPI to coordinate this project with the ndSLEDS project. This critical role will ensure there is no duplication between the two projects. He will also coordinate DPI's fiscal agent and grant administration duties with staff at DPI.

Director, Education Technology Council

Dan Pullen, Director, Education Technology Council, will coordinate this project with staff from EduTECH and the Center for Distance Education. In addition, he will play a key role in providing communication to school district level stakeholders and coordinating professional development efforts.

NDUS Project Liaison

Randall Thursby, NDUS Interim CIO and Mick Pytlik, Executive Director of ConnectND, NDUS, will act as liaisons to NDUS to coordinate this project with other NDUS activities. This critical role will ensure there is a close working relationship with NDUS and that issues are addressed in a timely manner.

Lead Technical Architect

Tracy Korsmo, ITD, will act as lead technical architect to ensure that the data architecture and system components meet North Dakota's requirements. He will work closely with the technical staff of state agencies and also with consultants to deploy the ND EdSmart system.

Subject Matter Experts / Data Stewards

Subject matter experts and data stewards from the agencies involved will play a key role in the project. They will be involved in establishing requirements concerning reporting, security and privacy. They will also be involved in sharing knowledge about the data, testing the system and ensuring data is converted cleanly. Representatives from K-12, early childhood, higher education and workforce programs will all play a role in the project as identified in the staffing plan.

Large Project Oversight

The project status report shall be submitted to the State Information Technology Department Large Project Oversight on a quarterly basis, or when a milestone exceeds twenty percent of planned cost or schedule. The report will include an executive summary, budget, schedule, issues, risks, project accomplishments and upcoming activities. Throughout the life of the project, if changes occur which would impact the project objectives as stated in the original business case, or changes to cost, schedule,

scope or quality as defined in the project plan, those impacts shall be included in the project status report.

Prior Successful Experience

In 2009, DPI received a SLDS grant from the U.S. Department of Education and to date the project is on track. A 2006 Title II-D grant was received from the U.S. Department of Education to cover some of the start-up costs associated with implementing the Viewpoint data warehouses in a number of the largest ND school districts. Fifty thousand dollars was used to pay for development of the North Dakota data model and $25,000 was used to pay for professional development for administrators and teachers in the first school districts that adopted the Viewpoint data warehouse. Both projects were implemented on-time and within budget.

Collaboration with Other States

As part of this project, North Dakota will adopt any national standards that exist for data interchange, preparing its systems to share data with other states. North Dakota supports collaboration with other states and has a number of efforts currently underway in this regard.

North Dakota, along with Minnesota and South Dakota, are participating in an initiative sponsored by the August Bush Foundation to increase student achievement. One of the Foundation's strategies is to develop effectiveness measures. The Foundation is working with state agencies and education researchers to develop new tools to analyze existing data to measure teacher effectiveness. North Dakota is actively engaged in this project and will include the data and required measures in the ND DataSmart data system.

DPI also participates in the Midwest Education Information Consortium (MEIC). This group of states from the Midwest, including Missouri, Kansas, Iowa, Minnesota, Nebraska, and North and South Dakota, meets regularly to discuss issues related to education data collection, use, and reporting. The group provides valuable insight into solutions to common problems.

NDUS participates in the Midwest Higher Education Compact (MEIC), a cooperative effort by twelve states to provide cost savings, student access and policy research. Last year, the MEIC was chaired by William Goetz, the Chancellor for NDUS. Current initiatives of MEIC revolve around e-transcripts, student retention and education to workforce (E2W).

Project Sustainability

North Dakota realizes that maintaining the ND EdSmart data system and using it to improve our educational and workforce training systems will require ongoing support in terms of resources and leadership. The SLDS Committee will be developing a budget request for state funds to sustain the ND EdSmart data system after the project is implemented. Individual agencies will be responsible for maintaining their source systems and ensuring data quality processes are followed. The SLDS Committee sees

ongoing training and lack of dedicated research staff as issues that will need to be addressed over the next three years in order to realize the full potential of the ND EdSmart data system. Using a "train the trainer" model, permanent staff will be identified during the project to provide ongoing training in the future. While there is no guarantee of future state funding, the concept of the SLDS has received broad executive and legislative support. The agencies involved are contributing their resources and expertise to make this project successful not just during the three year grant period but over the long term.

6. (e) Staffing

The SLDS Committee will provide the governance for this project as well as the governance for the ND EdSmart data system on an ongoing basis. The time they spend on the project is provided as an in-kind resource.

The project team is made up of individuals from several state agencies and will be responsible for the day-to-day management of the project. These people are identified in the chart below and their resumes are included in Appendix B.

Because this is a collaborative, multi-agency project, data stewards and subject matter experts will be identified for each data source being accessed by the ND EdSmart data system. The names and positions of a few key individuals in these types of roles are listed in the chart below. The time they spend on the project is provided as an in-kind resource.

The State Information Technology Department (ITD) will be responsible for hosting the system and supporting the system long term. ITD resources will be used in a number of technical roles during the project and will work closely with other consultants. ITD will also provide the internal project management resources for the project. These resources are budgeted at a rate of $85 per hour. The number of hours estimated for each role is included in Appendix A: Consultant Resource Allocation Table.

The four sub-projects in Outcome Six to update source systems will require additional resources in each of the individual agencies that manage those source systems. Two FTE will be added to the EduTech staff to accelerate the deployment of the PowerSchool application. Those agencies will be providing additional in-kind resources to ensure successful implementation. Because the in-kind resources currently exist and duties related to this project are part of their current job responsibilities, they have not been specifically identified in this grant application.

The State has been working with a number of other vendors to develop budget estimates for contracted resources. The Consultant Resource Allocation Table in Appendix A identifies the roles, number of hours and rates estimated for each outcome. The State will be establishing the scope of work for each sub-project and developing contracts through a competitive bidding process for these consulting resources.

State project personnel, roles and time commitments:

Name	Position	Role in Project	FTE or Hours
Lisa Feldner	State CIO	Project Sponsor	.05 FTE
12 Agency Executives	Members SLDS Committee	Governance	5 hours per month X 12
Tracy Korsmo	Business Intelligence Program Manager	Project team member and Lead technical architect	.5 FTE
Steve Snow	IT Director, DPI	Project team member and DPI/ndSLEDS liaison	.05 FTE
Dan Pullen	Director, ETC	Project team member and ND ETC and school district liaison and professional development coordinator	.05 FTE
Mick Pytlik	ConnectND Director	Project team member and NDUS liaison and higher education data expert	.05 FTE
Michel Hillman	Vice Chancellor for Academic and Student Affairs	Higher education subject matter expert	100 hours per year
Marsha Krotseng	Vice Chancellor for Strategic Planning & Executive Director/College Technical Education Council	Higher education subject matter expert	100 hours per year
Mark Backman	Research Analyst	UI data steward	100 hours per year
Laurie Matzke Linda Rorman	Title 1 Director Head Start – State Collaboration Office	Pre-K subject matter experts	100 hours per year each
Michelle Olsen	FINDET Coordinator	FINDET reporting expert	200 hours per year
Janet Welk	Director, Education Standards and Practice Board	Teacher licensure subject matter expert	100 hours per year
Jim Hirsch	Director, Workforce Development Division	Workforce development subject matter expert	100 hours per year
Wayne Kutzer	Director, Career and Technical Education	Perkins reporting subject matter expert	100 hours per year
Various agency staff		Other Subject Matter Experts and Data Stewards	1500 hours per year

Contractual Resources

The following table summarizes the detailed work estimates provided in Appendix A: Contractual Resource Allocation Table. These estimates were used to determine projected contractual costs. ITD resources will be used for their expertise with the existing system architecture and to gain the expertise necessary to maintain the system long term. Other consulting will be used to supplement the ITD resources and provide new expertise. Consulting contracts are typically procured on a fixed-price basis for specific deliverables rather than the hourly rates used for estimating purposes. This table is intended to show the types of skills / roles and the quantity of resources that are expected to be needed.

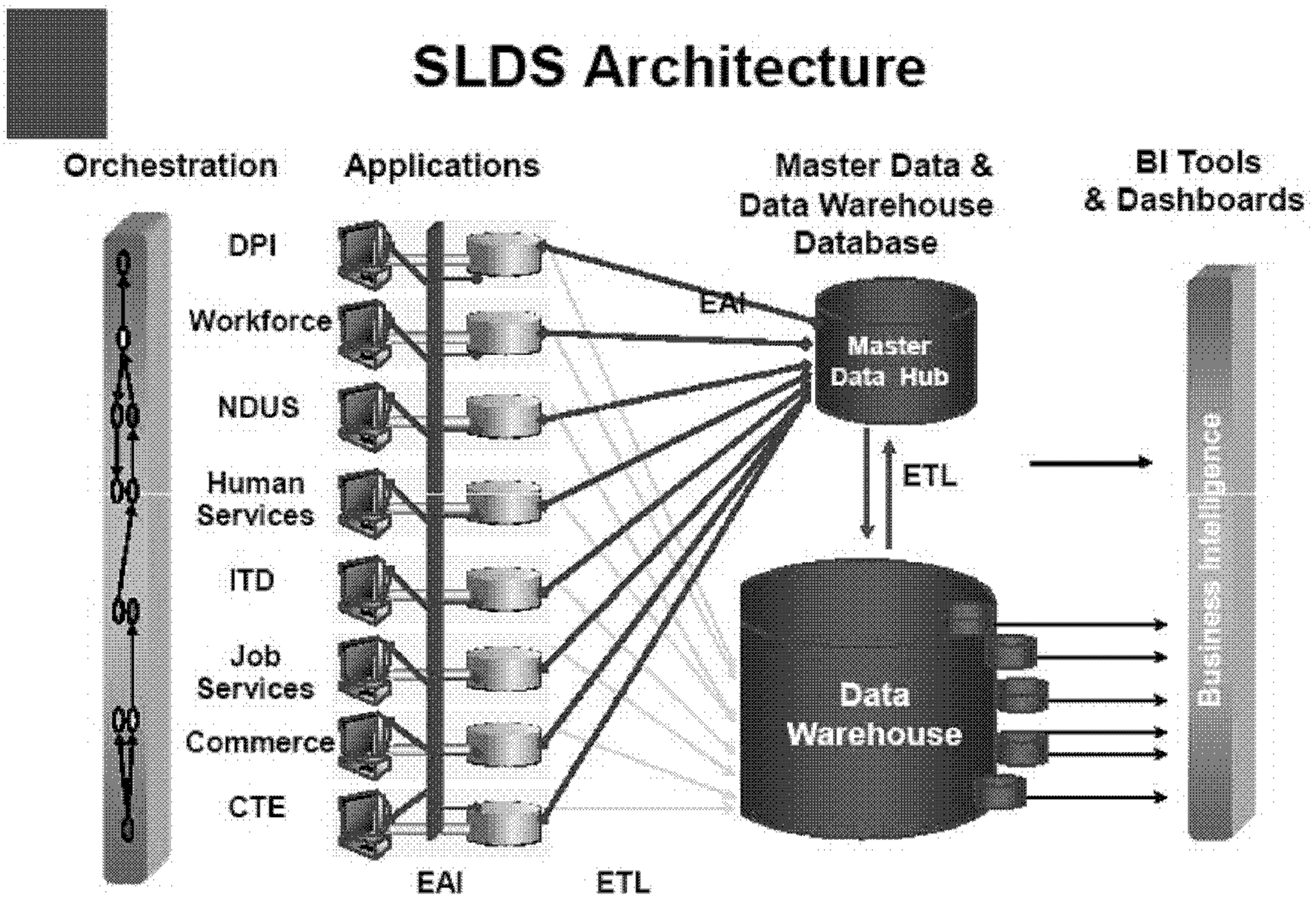
Role	Hourly Rate	Year1 Hours	Year2 Hours	Year3 Hours	Total Hours
Consulting Project Manager	$ 246.00	264	452	250	965
ITD DW/ETL Architect	$ 85.00	988	557	326	1,872
ITD Rptng/Security Architect	$ 85.00	590	461	240	1,291
Consulting MDM Architect	$ 228.00	973	856	168	1,997
ITD BI Analyst	$ 85.00	1,214	1,224	1,042	3,480
Consulting BI Analyst	$ 228.00	1,094	600	297	1,992
ITD DBA	$ 85.00	552	432	480	1,464
Consulting DBA	$ 200.20	552	552	480	1,584
ITD ETL Developer	$ 85.00	144	673	647	1,464
Consulting ETL Developer	$ 200.20	144	577	647	1,368
ITD Report Developer	$ 85.00	192	456	576	1,224
Consulting Report Developer	$ 200.20	192	456	576	1,224
Consulting MDM Developer	$ 200.20	433	1,026	240	1,699
ITD Powerschool Staff	$ 41.50	3,840	3,840	3,840	11,520
STARS Contractor	$ 120.00	624	192	96	912
Consulting System Admin	$ 200.00	150	150	600	900
Consulting DBA/DW Supt	$ 200.00	450	250	150	850
Consulting Infrastructure Supt	$ 200.00	200	200	400	950
ITD System Administration	$ 85.00	700	686	740	2,626
ITD Project Manager	$ 85.00	2,051	2,051	2,051	4,846
ITD Project Admin	$ 85.00	1,249	1,199	1,249	4,846
ITD Operations Staff	$ 85.00	300	250	300	1,050

Project Narrative

Project Narrative - Appendix A, Optional Attachments

Attachment 1:
Title: **ND Attachment A final** Pages: **15** Uploaded File: **C:\Documents and Settings\fsnow\Desktop\Grant Submission\MOA\ND Attachment A final.pdf**

Appendix A: ND EdSmart Conceptual Model



Appendix A: In-kind Personnel

Role	Hourly Rate	Benefits	Total Comp.	Each Year of the Project		
				Hours	Salary	Benefits
Project Sponsor	$50.95	$13.06	$64.01	104	$5,299	$1,358
12 SLDS Committee Members	$50.95	$13.06	$64.01	720	$36,683	$9,402
Lead Technical Architect	$85.00	$0.00	$85.00	780	$66,300	$0
4 Project Team Members / Agency Liaisons	$50.95	$13.06	$64.01	416	$21,194	$5,432
25 Subject Matter Experts and Data Stewar	$28.03	$9.42	$37.45	2,500	$70,067	$23,549
NDUS WFT Developer	$37.20	$10.88	$48.08	1,341	$49,885	$14,585
Total					$199,543	$39,742

Average State Executive Salary was used for Project Sponsor, SLDS Committee Members and Project Team Members.
Average for State Program Managers, Grade 13 was used for Subject Matter Experts.
ITD Consultant Rate was used for Lead Technical Architect.

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North Dakota EdSmart Data System
Appendix A: Consultant Resource Allocation Table

Role	Hourly Rate	Outcome1					
		Year1		Year2		Year3	
		Hours	Amount	Hours	Amount	Hours	Amount
Consulting - Project Manager	$ 246.00	72	$ 17,712	58	$ 14,193	48	$ 11,784
ITD - DW/ETL Architect	$ 85.00	432	$ 36,720	96	$ 8,168	62	$ 5,296
ITD - Rptng/Security Architect	$ 85.00	240	$ 20,400	-	$ -	-	$ -
Consulting - MDM Architect	$ 228.00	120	$ 27,360	-	$ -	-	$ -
ITD - BI Analyst	$ 85.00	768	$ 65,280	408	$ 34,680	34	$ 2,856
Consulting - BI Analyst	$ 228.00	336	$ 76,608	264	$ 60,247	57	$ 13,078
ITD - DBA	$ 85.00	264	$ 22,440	312	$ 26,540	240	$ 20,380
Consulting - DBA	$ 200.20	264	$ 52,853	312	$ 62,510	240	$ 48,000
ITD - ETL Developer	$ 85.00	144	$ 12,240	673	$ 57,181	359	$ 30,539
Consulting - ETL Developer	$ 200.20	144	$ 28,829	577	$ 115,459	359	$ 71,928
ITD - Report Developer	$ 85.00	-	$ -	-	$ -	-	$ -
Consulting - Report Developer	$ 200.20	-	$ -	-	$ -	-	$ -
Consulting - MDM Developer	$ 200.20	-	$ -	-	$ -	-	$ -
ITD - Powerschool Implementors	$ 41.50						
STARS Contractor	$ 120.00	-	$ -	-	$ -	-	$ -
Consulting - Sytem Administration	$ 200.00	50	$ 10,000	50	$ 10,000	200	$ 40,000
Consulting - DBA/DW Support	$ 200.00	200	$ 40,000	100	$ 20,000	50	$ 10,000
Consulting - Portal Development	$ 200.00		$ -		$ -		$ -
Consulting - Infrastructure Support	$ 200.00	50	$ 10,000	50	$ 10,000	100	$ 20,000
ITD - Sytem Administration	$ 85.00	200	$ 17,000	200	$ 17,000	200	$ 17,000
ITD Project Manager	$ 85.00	667	$ 56,695	667	$ 56,695	667	$ 56,695
ITD Project Admin	$ 85.00	100	$ 8,500	100	$ 8,500	100	$ 8,500
ITD Operations	$ 85.00	100	$ 8,500	100	$ 8,500	100	$ 8,500
Est Consultant Travel			$ 47,405		$ 52,634		$ 38,662

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North Dakota EdSmart Data System
Appendix A: Consultant Resource Allocation Table

Role	Hourly Rate	Outcome2					
		Year1		Year2		Year3	
		Hours	Amount	Hours	Amount	Hours	Amount
Consulting - Project Manager	$ 246.00	77	$ 18,916	182	$ 44,847	10	$ 2,362
ITD - DW/ETL Architect	$ 85.00	168	$ 14,288	197	$ 16,720	24	$ 2,040
ITD - Rptng/Security Architect	$ 85.00	24	$ 2,040	-	$ -	-	$ -
Consulting - MDM Architect	$ 228.00	168	$ 38,359	437	$ 99,536	24	$ 5,472
ITD - BI Analyst	$ 85.00	168	$ 14,280	480	$ 40,800	-	$ -
Consulting - BI Analyst	$ 228.00	576	$ 131,328	-	$ -	-	$ -
ITD - DBA	$ 85.00	216	$ 18,401	120	$ 10,159	48	$ 4,080
Consulting - DBA	$ 200.20	216	$ 43,339	240	$ 47,952	48	$ 9,610
ITD - ETL Developer	$ 85.00	-	$ -	-	$ -	-	$ -
Consulting - ETL Developer	$ 200.20	-	$ -	-	$ -	-	$ -
ITD - Report Developer	$ 85.00	-	$ -	-	$ -	-	$ -
Consulting - Report Developer	$ 200.20	-	$ -	-	$ -	-	$ -
Consulting - MDM Developer	$ 200.20	433	$ 86,631	954	$ 191,087	48	$ 9,610
ITD - Powerschool Implementors	$ 41.50						
STARS Contractor	$ 120.00	624	$ 74,880	192	$ 23,040	-	$ -
Consulting - Sytem Administration	$ 200.00	50	$ 10,000	50	$ 10,000	200	$ 40,000
Consulting - DBA/DW Support	$ 200.00	200	$ 40,000	100	$ 20,000	50	$ 10,000
Consulting - Portal Development	$ 200.00		$ -		$ -		$ -
Consulting - Infrastructure Support	$ 200.00	50	$ 10,000	50	$ 10,000	100	$ 20,000
ITD - Sytem Administration	$ 85.00	200	$ 17,000	200	$ 17,000	200	$ 17,000
ITD Project Manager	$ 85.00	667	$ 56,695	667	$ 56,695	667	$ 56,695
ITD Project Admin	$ 85.00	100	$ 8,500	50	$ 4,250	50	$ 4,250
ITD Operations	$ 85.00	100	$ 8,500	50	$ 4,250	50	$ 4,250
Est Consultant Travel			$ 68,143		$ 76,216		$ 17,470

Grant Application CFDA Number 84.384
North Dakota EdSmart Data System
Appendix A: Consultant Resource Allocation Table

Role	Hourly Rate	Outcome3					
		Year1		Year2		Year3	
		Hours	Amount	Hours	Amount	Hours	Amount
Consulting - Project Manager	$ 246.00	19	$ 4,723	48	$ 11,808	96	$ 23,616
ITD - DW/ETL Architect	$ 85.00	82	$ 6,936	48	$ 4,080	96	$ 8,160
ITD - Rptng/Security Architect	$ 85.00	264	$ 22,440	432	$ 36,720	240	$ 20,400
Consulting - MDM Architect	$ 228.00	-	$ -	-	$ -	-	$ -
ITD - BI Analyst	$ 85.00	144	$ 12,240	336	$ 28,560	240	$ 20,400
Consulting - BI Analyst	$ 228.00	120	$ 27,360	336	$ 76,608	240	$ 54,720
ITD - DBA	$ 85.00	24	$ 2,040	-	$ -	96	$ 8,160
Consulting - DBA	$ 200.20	24	$ 4,805	-	$ -	96	$ 19,219
ITD - ETL Developer	$ 85.00	-	$ -	-	$ -	-	$ -
Consulting - ETL Developer	$ 200.20	-	$ -	-	$ -	-	$ -
ITD - Report Developer	$ 85.00	192	$ 16,320	384	$ 32,640	480	$ 40,800
Consulting - Report Developer	$ 200.20	192	$ 38,438	384	$ 76,877	480	$ 96,096
Consulting - MDM Developer	$ 200.20	-	$ -	-	$ -	-	$ -
ITD - Powerschool Implementors	$ 41.50						
STARS Contractor	$ 120.00	-	$ -	-	$ -	-	$ -
Consulting - Sytem Administration	$ 200.00	50	$ 10,000	50	$ 10,000	200	$ 40,000
Consulting - DBA/DW Support	$ 200.00	50	$ 10,000	50	$ 10,000	50	$ 10,000
Consulting - Portal Development	$ 200.00	300	$ 60,000	600	$ 120,000	200	$ 40,000
Consulting - Infrastructure Support	$ 200.00	100	$ 20,000	100	$ 20,000	200	$ 40,000
ITD - Sytem Administration	$ 85.00	200	$ 17,000	200	$ 17,000	200	$ 17,000
ITD Project Manager	$ 85.00	667	$ 56,695	667	$ 56,695	667	$ 56,695
ITD Project Admin	$ 85.00	50	$ 4,250	50	$ 4,250	100	$ 8,500
ITD Operations	$ 85.00	50	$ 4,250	50	$ 4,250	100	$ 8,500
Est Consultant Travel			$ 31,559		$ 58,553		$ 58,257

Grant Application CFDA Number 84.384
North Dakota EdSmart Data System
Appendix A: Consultant Resource Allocation Table

Role	Hourly Rate	Outcome4					
		Year1		Year2		Year3	
		Hours	Amount	Hours	Amount	Hours	Amount
Consulting - Project Manager	$ 246.00	48	$ 11,714	106	$ 26,072	38	$ 9,446
ITD - DW/ETL Architect	$ 85.00	124	$ 10,559	159	$ 13,513	58	$ 4,896
ITD - Rptng/Security Architect	$ 85.00	-	$ -	-	$ -	-	$ -
Consulting - MDM Architect	$ 228.00	647	$ 147,416	361	$ 82,408	96	$ 21,888
ITD - BI Analyst	$ 85.00	-	$ -	-	$ -	768	$ 65,280
Consulting - BI Analyst	$ 228.00	-	$ -	-	$ -	-	$ -
ITD - DBA	$ 85.00	-	$ -	-	$ -	-	$ -
Consulting - DBA	$ 200.20	-	$ -	-	$ -	-	$ -
ITD - ETL Developer	$ 85.00	-	$ -	-	$ -	-	$ -
Consulting - ETL Developer	$ 200.20	-	$ -	-	$ -	-	$ -
ITD - Report Developer	$ 85.00	-	$ -	-	$ -	-	$ -
Consulting - Report Developer	$ 200.20	-	$ -	-	$ -	-	$ -
Consulting - MDM Developer	$ 200.20	-	$ -	-	$ -	-	$ -
ITD - Powerschool Implementors	$ 41.50						
STARS Contractor	$ 120.00	-	$ -	-	$ -	-	$ -
Consulting - Sytem Administration	$ 200.00						
Consulting - DBA/DW Support	$ 200.00						
Consulting - Portal Development	$ 200.00		$ -		$ -		$ -
Consulting - Infrastructure Support	$ 200.00						
ITD - Sytem Administration	$ 85.00		$ -		$ -		$ -
ITD Project Manager	$ 85.00		$ -		$ -		$ -
ITD Project Admin	$ 85.00	333	$ 28,305	333	$ 28,305	333	$ 28,305
ITD Operations	$ 85.00		$ -		$ -		$ -
Est Consultant Travel			$ 28,643		$ 19,526		$ 5,640

Grant Application CFDA Number 84.384
North Dakota EdSmart Data System
Appendix A: Consultant Resource Allocation Table

Role	Hourly Rate	Outcome5					
		Year1		Year2		Year3	
		Hours	Amount	Hours	Amount	Hours	Amount
Consulting - Project Manager	$ 246.00	48	$ 11,808	58	$ 14,170	38	$ 9,446
ITD - DW/ETL Architect	$ 85.00	86	$ 7,344	58	$ 4,896	38	$ 3,264
ITD - Rptng/Security Architect	$ 85.00	62	$ 5,304	29	$ 2,448	-	$ -
Consulting - MDM Architect	$ 228.00	38	$ 8,755	58	$ 13,133	-	$ -
ITD - BI Analyst	$ 85.00	86	$ 7,344	-	$ -	-	$ -
Consulting - BI Analyst	$ 228.00	62	$ 14,227	-	$ -	-	$ -
ITD - DBA	$ 85.00	48	$ 4,080	-	$ -	96	$ 8,160
Consulting - DBA	$ 200.20	48	$ 9,610	-	$ -	96	$ 19,219
ITD - ETL Developer	$ 85.00	-	$ -	-	$ -	96	$ 8,160
Consulting - ETL Developer	$ 200.20	-	$ -	-	$ -	96	$ 19,219
ITD - Report Developer	$ 85.00	-	$ -	72	$ 6,120	96	$ 8,160
Consulting - Report Developer	$ 200.20	-	$ -	72	$ 14,414	96	$ 19,219
Consulting - MDM Developer	$ 200.20	-	$ -	72	$ 14,414	96	$ 19,219
ITD - Powerschool Implementors	$ 41.50						
STARS Contractor	$ 120.00	-	$ -	-	$ -	96	$ 11,520
Consulting - Sytem Administration	$ 200.00						
Consulting - DBA/DW Support	$ 200.00						
Consulting - Portal Development	$ 200.00		$ -		$ -		$ -
Consulting - Infrastructure Support	$ 200.00						
ITD - Sytem Administration	$ 85.00	100	$ 8,500	50	$ 4,250	50	$ 4,250
ITD Project Manager	$ 85.00	50	$ 4,250	50	$ 4,250	50	$ 4,250
ITD Project Admin	$ 85.00	333	$ 28,305	333	$ 28,305	333	$ 28,305
ITD Operations	$ 85.00	50	$ 4,250	50	$ 4,250	50	$ 4,250
Est Consultant Travel			$ 7,992		$ 10,104		$ 15,538

Grant Application CFDA Number 84.384
North Dakota EdSmart Data System
Appendix A: Consultant Resource Allocation Table

Role	Hourly Rate	Outcome6					
		Year1		Year2		Year3	
		Hours	Amount	Hours	Amount	Hours	Amount
Consulting - Project Manager	$ 246.00	-	$ -			19	$ 4,723.20
ITD - DW/ETL Architect	$ 85.00	96	$ 8,160			48	$ 4,080.00
ITD - Rptng/Security Architect	$ 85.00	-	$ -	-	$ -	-	$ -
Consulting - MDM Architect	$ 228.00	-	$ -			48	$ 10,944.00
ITD - BI Analyst	$ 85.00	48	$ 4,080	-	$ -	-	$ -
Consulting - BI Analyst	$ 228.00	-	$ -	-	$ -	-	$ -
ITD - DBA	$ 85.00	-	$ -	-	$ -	-	$ -
Consulting - DBA	$ 200.20	-	$ -	-	$ -	-	$ -
ITD - ETL Developer	$ 85.00	-	$ -			192	$ 16,320.00
Consulting - ETL Developer	$ 200.20	-	$ -			192	$ 38,438.40
ITD - Report Developer	$ 85.00	-	$ -	-	$ -	-	$ -
Consulting - Report Developer	$ 200.20	-	$ -	-	$ -	-	$ -
Consulting - MDM Developer	$ 200.20	-	$ -			96	$ 19,219.20
ITD - Powerschool Implementors	$ 41.50	3,840	$ 159,360	3,840	$ 159,360	3,840	$ 159,360.00
STARS Contractor	$ 120.00	-	$ -	-	$ -	-	$ -
Consulting - Sytem Administration	$ 200.00						
Consulting - DBA/DW Support	$ 200.00						
Consulting - Portal Development	$ 200.00		$ -		$ -		$ -
Consulting - Infrastructure Support	$ 200.00						
ITD - Sytem Administration	$ 85.00		$ -	36	$ 3,020	90	$ 7,679.75
ITD Project Manager	$ 85.00		$ -		$ -		$ -
ITD Project Admin	$ 85.00	333	$ 28,305	333	$ 28,305	333	$ 28,305.00
ITD Operations	$ 85.00		$ -		$ -		$ -
Est Consultant Travel			$ -		$ -		$ 13,198.46

FYI -

Department of Public Instruction
600 E Boulevard Ave., Dept. 201, Bismarck, ND 58505-0440
(701) 328-2260 Fax – (701) 328-2461
http://www.dpi.state.nd.us

Dr. Wayne G. Sanstead
State Superintendent

To: North Dakota University System
From: North Dakota Department of Public Instruction
Subject: Data Sharing Agreement

1. This Data Sharing Agreement is entered into between the North Dakota Department of Public Instruction (hereinafter "DPI") and the North Dakota University System (hereinafter "NDUS").

   NDUS and/or DPI may amend this agreement by mutual consent, in writing, at any time.

2. Purpose of Agreement
   Linking students between DPI and NDUS necessitates the need to exchange certain demographic data. The data provided by DPI will enhance NDUS to further analyze the student data and provide additional information back to the school districts.

   This data analysis will increase the capacity of local school districts to better prepare students for entry into the post secondary system and also assist college counselors to guide students in pursuing career and educational goals.

   The data will only be used for research and/or analytical purposes and will not be used to determine eligibility or to make any other determinations affecting an individual.

3. Period of Agreement
   The period of this Agreement shall be in effect from 20 Oct 2008 until terminated in writing by either organization.

School for the Deaf
Devils Lake, ND
(701) 662-9000

School for the Blind
Grand Forks, ND
(701) 765-2700

State Library
Bismarck, ND
(701) 328-2492

Department of Public Instruction
600 E Boulevard Ave., Dept. 201, Bismarck, ND 58505-0440
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http://www.dpi.state.nd.us

Dr. Wayne G. Sanstead
State Superintendent

4. Description of Data

The data elements to be exchanged are listed below. If additional elements are needed NDUS and/or DPI may amend this agreement by mutual consent, in writing, at any time. Further details of the data and format of exchange will be listed in a data extract guide.

Field	Description
Source ID	Unique ID of source
Student ID	Unique ID of student (K12)
Last Name	Student's last name
Middle Name	Student's middle name
First Name	Student's first name
Birth Date	Student's birth date
Gender	Student's gender
School ID	Unique ID of K12 school
Graduation Year	Date graduated from High School
NDUS Student ID	Unique ID of student (Higher Education)

5. Method of Transfer

NDUS and DPI will employ industry best practices, both technically and procedurally, to protect DPI data from unauthorized physical and electronic access during transfer. Methods employed are subject to review and approval by NDUS and DPI.

6. Security of Data

Both Parties will assume responsibility of data received from each other and will employ industry best practices, both technically and procedurally, to protect data from unauthorized physical and electronic access. Methods employed are subject to review and approval by each Party.

Both Parties will comply with all applicable federal and state laws and regulations protecting the privacy of citizens including the Family Educational Rights and Privacy Act (FERPA).

Both Parties will be notified in the event the security, confidentiality or integrity of the data exchanged is, or is reasonably believed to have been, compromised. Notification will take place within 24 hours of discovery. Appropriate course(s) of action will be determined based on inputs from both NDUS and DPI representatives.

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Dr. Wayne G. Sanstead
State Superintendent

Exchange of data between either DPI or NDUS and 3rd party contractors is subject to the requirements outlined in this agreement.

7. Disposition of Data
   Both DPI and NDUS will destroy all data when no longer needed to achieve the purpose of the project as outlined above. Written notification will be sent to either party when completed.

8. I have read, understood, and will comply with these requirements

Name of NDUS Representative William G. Goetz

William G. Goetz

Title of NDUS Representative Chancellor

Signature of NDUS Representative William G. Goetz Date 11/4/08

9. I have read, understood, and will comply with these requirements

Name of DPI Representative G. David Massey

Title of DPI Representative Assistant State Superintendent

Signature of DPI Representative G. David Massey Date 11/4/08

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(701) 662-9000

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(701) 765-2700

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(701) 328-2492

Memorandum of Understanding

SLDS Project – Cooperation Agreement

Purpose of the Agreement:

The purpose of this Memorandum of Understanding (MOU) is to clearly define the roles and responsibilities of the Statewide Longitudinal Data System (SLDS) Committee, the Department of Public Instruction and the Information Technology Department with respect to the application for and administration of a grant for a North Dakota SLDS project. The grant is offered though the Statewide Longitudinal Data System Grant Program, as authorized by the Educational Technical Assistance Act of 2002, Title II, administered by the Institute of Education Sciences (IES). The agencies involved will be partnering to provide the necessary resources for a successful grant application and delivery of the outcomes proposed in the application. This agreement outlines the assumptions and expectations of those involved.

Terms of the Agreement:

1. This agreement may be modified at any time with the consent of all parties.
2. The term of the agreement is the length of the SLDS grant project.
3. The initial agreement sets the groundwork for the relationship. Specific roles, responsibilities and expectations will be defined as the project proceeds. Those expectations will be outlined in documents such as the grant application, project plans and other formal project documents.

Project Background:

In August of 2009, the ICES released a Request for Applications (RFA) for fiscal year 2009 American Recovery and Reinvestment Act (ARRA) funds to develop Statewide Longitudinal Data Systems. Following are a few of the requirements outlined in the grant:

- The application must be submitted by the State Educational Agency, i.e. DPI.
- The grant requires broad governance involving stakeholders from the entities concerned with providing and using data.
- DPI must be the fiscal agent to report and track funds.
- Funds may be spent with other agencies but must be passed through DPI.
- The due date for the application is November, 19, 2009.
- Grants are for a term of up to three years.
- Grants are intended to improve the linking of K-12 student data with postsecondary and workforce data, including the linking of student outcomes to teacher data and teacher data to teacher preparation program data.

North Dakota Century Code (NDCC) 15.1-02-18 (see attached) establishes the Statewide Longitudinal Data System Committee as the governing body of projects of this kind. The committee is made up of key stakeholders from the agencies involved in sharing education and workforce data.

The 2009 Legislature appropriated $2.2 million in spending authority in ITD's budget to build a SLDS in anticipation of ARRA funds being available.

SLDS Committee

The membership of the SLDS Committee is outlined in NDCC and it is given responsibility for the maintenance of a SLDS as well as policy setting and rule making regarding the SLDS. Therefore, SLDS Committee will act as the governing body for the grant application and the SLDS project. Because developing the SLDS is a multi-agency project, it will require the commitment and resources of many of the member agencies. Expectations of the SLDS Committee and its members are as follows:

- The SLDS Committee will review and approve the grant application for submission by DPI.
- The SLDS Committee will be the decision-making body with regard to the grant application and the SLDS project including budget and financial decisions.
- Members of the committee or their staff will provide input and feedback to the grant writing committee and project team in a timely manner.
- To ensure their commitment, members should clearly identify requirements, resources needed and constraints of their respective agency regarding the proposal.
- Following approval of the grant application, members of the committee will support the project and honor the commitments of their respective agencies as defined in the grant application.
- If the grant is received, the SLDS Committee will be the decision-making authority regarding project plans and other project documents, policy regarding the SLDS and fiscal oversight.

Department of Public Instruction (DPI)

DPI, as the State Education Agency, has a primary role regarding the SLDS as a major contributor of data. It is also the principal receiver of outcome data from other data sources such as postsecondary and workforce. Expectations with regard to the 2009 SLDS grant and DPI's role in general regarding the North Dakota SLDS are as follows:

- DPI will submit the grant as required in the RFA. This includes providing the resources to enter information required, check that all information requirements are met and ensure that ICES has received the application by the deadline.
- Steve Snow will actively participate as a member of the grant writing team and will be DPI's primary contact for the project.
- DPI will actively participate in meetings and decision-making as a member of the SLDS Committee.

- If the grant is received, DPI will act as fiscal agent and submit financial and status reports to ICES as required. DPI will establish a process so that other agencies may submit expenses and be reimbursed from grant funds with approval from the ITD project manager.

Information Technology Department (ITD)

Including the Education Technology Council (ETC) and EduTech

In NDCC 15.1-02-18, ITD is designated as the agency responsible for maintaining the SLDS. ITD and its divisions, ETC and EduTech, have the primary role for technology in the state and have substantial experience managing projects like this. To ensure a successful SLDS project, ITD will meet the following expectations:

- Lisa Feldner, Tracy Korsmo, Nancy Walz and Dan Pullen (ETC) will actively participate as members of the grant writing team.
- ITD will provide regular status reports to the SLDS Committee.
- ITD will actively participate in meetings and decision-making as a member of the SLDS Committee.
- ITD will provide DPI with the grant application and other information required for submission to ICES that has been developed by the grant application committee.
- If received, ITD will provide project management to administer the project and grant funds. The project manager will work closely with DPI to track expenditures and provide status reports to ICES.

Approvals

Wayne G. Sanstead 9-15-09

Dr. Wayne Sanstead — Date
State Superintendent
Department of Public Instruction

Lisa Feldner 9-18-09

Dr. Lisa Feldner — Date
Chief Information Officer
Information Technology Department

9/22/2009

Date approved by the SLDS Committee

North Dakota Century Code
Authorization for the Statewide Longitudinal Data System Committee

15.1-02-18. Statewide longitudinal data system committee - Membership – Powers and duties - Report to interim committee - Continuing appropriation.

1. The statewide longitudinal data system committee consists of:

a. The chancellor of the board of higher education or chancellor's designee.

b. The superintendent of public instruction or superintendent of public instruction's designee.

c. The chief information officer or chief information officer's designee.

d. The director of the department of career and technical education or the director's designee.

e. The director of job service North Dakota or the director's designee.

f. The commissioner of commerce or the commissioner's designee.

g. The director of the department of human services or the director's designee.

h. The director of the North Dakota educational technology council.

i. The director of the North Dakota council of educational leaders or the director's designee.

j. The director of the North Dakota workforce development council or the director's designee.

k. Two members of the legislative assembly appointed by the chairman of the legislative management.

2. The governor shall appoint the chair of the committee. The committee may appoint advisory committees that would serve in an advisory capacity to the committee.

3. The committee shall manage a longitudinal data system which:

a. Provides for dissemination of management information to stakeholders and partners of state education, training, and employment systems; and

b. Uses data from educational and workforce systems as central sources of longitudinal data.

4. The information technology department, at the direction of the committee, shall maintain a statewide longitudinal data system among education, workforce, and training entities. The department and the committee may, subject to federal and state privacy laws, enter interagency agreements, including agreements designating authorized representatives of the educational agencies participating in the system pursuant to the Family Educational Rights and Privacy Act (FERPA) [20 U.S.C. 1232g; 34 CFR 99].

5. The committee shall set policy and adopt rules relating to access to and the collection, storage, and sharing of information and the systems necessary to perform those functions, subject to applicable federal and state privacy laws and interagency agreements and restrictions relating to confidential information required to conform to applicable federal and state privacy laws. The committee shall provide operational oversight for information sharing activities and make recommendations for and provide oversight of information sharing budgets. The committee may authorize studies to benefit and improve workforce training and education.

6. The committee shall provide a report to the information technology committee, interim committee on education issues, and interim committee on economic development on the status of the statewide longitudinal data system. The report must include recommendations for further development, cost proposals, proposals for legislation, and data sharing governance.

Project Narrative

Project Narrative - Appendix B Resumes of Key Personnel

Attachment 1:
Title: **ND Resumes** Pages: **18** Uploaded File: **C:\Documents and Settings\fsnow\Desktop\Grant Submission\ND Resumes.pdf**

Information Technology Department

600 E Boulevard Ave., Dept 112 • Bismarck, ND 58505-0100 • (701) 328-3190

LISA FELDNER, Ph. D., CIO

EDUCATION

2003	PhD, University of ND, Educational Leadership
1990	MS, Minot State University, Mathematics
1986	BS, Minot State University, Computer Science
1986	BS, Minot State University, Business Education

EXPERIENCE

2006-present Chief Information Officer, State of North Dakota

Appointed by Governor Hoeven, the Chief Information Officer (CIO) oversees technology activities in state and local government, K-12, higher education, and manages a staff of over 300 employees and a budget of over $60 million.

2006-present Governor's Cabinet, State of North Dakota
2006-present Chair, ND Criminal Justice Information Sharing Board
2007-present Chair, ND Statewide Longitudinal Data System Committee
2009-present Chair, ND Health Information Technology Advisory Committee
2006-present Member, National Association of State Chief Information Officers
2007-present Member, NASCIO Health IT Working Group
2000-present Member, North Dakota Council of Educational Leaders

1991-2006 Director of Technology, Bismarck Public Schools

Managed the budget and staff, including planning and integration of software and hardware systems for more than 13,000 users at 26 campuses.

2001-present Member & Past Chair, Education Technology Council

Appointed by Governor Hoeven. The Council is responsible for providing leadership in technology for K-12 education in North Dakota.

2001-2006 Member, Technical Committee of ND State Network

ND StageNet is the state network for ND state agencies, political subdivisions, higher education, and K-12 schools. This committee deals with such issues as the roll-out of Internet2 and statewide video conferencing.

2000 - present Member & Former Chair, North Dakota Association of Technology Leaders

NDATL is an organization dedicated to providing leadership and professional development to school districts in North Dakota.

1991-2005 Founder & Director, Teaching and Technology Conference

Each June, TNT provides technology training and information to over 1,000 educators throughout North Dakota and the surrounding region.

1989-1991 Assistant Technology Coordinator, Minot Public Schools

Dan Pullen

(b)(6)

danpullen@nd.gov

Professional Experience

Director of the North Dakota Educational Technology Council, 2001 - present.

Dan Pullen is the director of the North Dakota Educational Technology Council and serves as the North Dakota Director of K12 Educational Technology.

The ND Educational Technology Council is a state agency responsible for coordinating educational technology initiatives for elementary and secondary education. The ND ETC serves as the policy board for two service agencies: EduTech, a statewide learning technologies professional development and IT service center (21 employees), and the ND Center for Distance Education, the state's distance education high school (42 employees).

See http://www.state.nd.us/itd/etc/ and http://www.state.nd.us/itd/etc/docs/org.pdf.

Director of the Center for Innovation in Instruction, 1993-2001

The ND C.I.I. provides professional development for K12 teachers in the use of learning technologies in the classroom (8 employees).

Education Coordinator, SENDIT K12 telecommunication network, 1989-1993.

SENDIT provided North Dakota K12 schools their first Internet access, email and bulletin board services.

Education.

Ph.D. Program in Occupational and Adult Education
Current - NDSU, Fargo, ND

M.A. Organizational Communications
1989 - NDSU, Fargo, ND

B.S. Mass Communications
1972 - MSUM, Moorhead, MN

Related Experience.

- Managed the start-up of three statewide school technology service entities and a number of other statewide initiatives in the last 18 years.

Michel G. Hillman
(b)(6)

Telephone:
(b)(6)
Office: (701) 328-2960
(b)(6)

Electronic Mail:
(b)(6)
Office: Michel.Hillman@ndus.edu

Education

Ph.D. in Experimental Psychology - University of South Dakota, Vermillion, SD (1976)

M.A. in Experimental Psychology - Indiana University of Pennsylvania, Indiana, PA (1974)

B.A. in Psychology - Slippery Rock State College, Slippery Rock, PA (1972)

Professional Experience

Title: Vice Chancellor for Academic & Student Affairs
Dates: July 2003 to Present

North Dakota University System
600 E. Boulevard Ave. Dept. 215
Bismarck, ND 58505-0230

Summary of Current Duties

Serve as the system chief academic and student affairs officer, reporting to the Chancellor. This includes chairing the system Academic Affairs and Student Affairs Councils; serving as Chancellor's designee on the State Longitudinal Data System Committee (2007-2009), the North Dakota Indian Scholarship Board and the Joint Boards P-20 staff committee.

Examples of Specific Responsibilities:

- North Dakota Indian Scholarship Board (Chair of Board and senior program administrator)
- North Dakota Intimate Partner Violence/Sexual Violence State Prevention Team (Higher Education representative and University System Liaison)
- Represent the University System on academic, student affairs and research issues during the Legislative session and during the Interim Legislative process
- Provide staff support to the North Dakota Roundtable on Higher Education - the state higher education planning and advisory group composed of legislative, education and private sector leadership
- Produce or direct the production of regular/annual reports on academic, student affairs, and faculty issues including:
  - Annual Accountability Measure Report (academic and student performance sections)
  - Programs Offered/Programs Completed in the NDUS
  - Fall Enrollment Reports
  - Annual Enrollment Reports
  - Follow-up Information on North Dakota Education and Training (FINDET)
  - Higher Education Research Institute (UCLA/HERI) Faculty Survey
- Provide staff support to North Dakota's Joint Boards of Education (State Board for Higher Education, State Board for Public School Education, State Board for Career and Technical Education and the Education Standards and Practices Board)

Michel G. Hillman

Examples of Staff Functions:

- Chair the Academic Affairs Council, (the system senior academic advisory group) and the Student Affairs Council (the system senior student affairs advisory group)
- Testify before Legislative Committees on higher education and P-20 issues

Examples of Administrative Functions:

- Serve as liaison between the Chancellor's Office and other system groups including the Council of College Faculties and EPSCoR, the state research initiative
- Administer the federal Title II (Math and Science) Higher Education program in North Dakota

Examples of Current Projects:

- Develop and supervise North Dakota University System Online (There are 120 Online programs and 17,000 Online student registrations)
- Implement the first ND Tribal College Funding program

Examples of Accomplishments:

- Coordinated the system effort to improve state research competitiveness, resulting in new intellectual property and technology transfer legislation (2007 HB 1099)
- Served on team leading the Joint Boards of Education effort to develop a comprehensive state P-16 plan with the support of the state Chamber of Commerce

Examples of Recent Activities:

- Represented the University System in October 2008 in discussions with Minister Tora Aasland, Norwegian Ministry of Education and Research
- Regular presenter at the annual Higher Education Resource Organization for Student Conference (HEROS, the state student support services organization for meeting the needs of Native American students) Honored for leadership at the 2000 meeting
- Rebuilding Together (formerly "Christmas in April") volunteer work in the Bismarck/Mandan area

Former Committee Responsibilities:

- PayPerS Development Group (new ERP system, Chair)
- Statewide Computer Task Force (Coordinator)
- System for the Electronic Analysis and Retrieval of Criminal Histories (SEARCH GROUP INC.), 1989, 1981

G:\Michel\Abbreviated Resume 11-25-09

MARSHA VAN DYKE KROTSENG
(b)(6)
Office Telephone: 701.328.2960
E-mail: marsha.krotseng@ndus.edu

Education

Ed.D., Higher Education, The College of William and Mary, Williamsburg, Virginia, 1987

M.Ed., Educational Administration, The College of William and Mary, Williamsburg, Virginia, 1981

B.A., Spanish (minor in German), The College of William and Mary, Williamsburg, Virginia, 1977

Higher Education Experience

Vice Chancellor for Strategic Planning and Executive Director, College Technical Education Council
North Dakota University System 2007 -

Responsible for working with the University System's numerous stakeholders to plan for the future of North Dakota's eleven public universities and colleges through processes such as the Higher Education Roundtable. The University System includes two research universities, four regional universities, and five community colleges. As Executive Director of the College Technical Education Council, convene monthly meetings of the Community College Presidents and State Director of Career and Technical Education. Serve as University System liaison for the Workforce Training Directors in the community colleges and coordinate their performance measures reporting.

Valdosta State University, Valdosta, Georgia
Associate Vice President 2002-2007

West Liberty State College, West Liberty, West Virginia
Vice Provost and Executive Assistant to the President 1999-2002

Cleveland State University, Cleveland, Ohio
Associate Provost for Strategic Planning, Analysis, Assessment, and Program Review 1998-1999

State College and University Systems of West Virginia, Charleston, West Virginia
Director of Research and Information Systems 1991-1998
Interim Director of Finance and Facilities August 1995-December 1995

The University of Hartford, West Hartford, Connecticut
Assistant Director, Planning and Institutional Research 1989-1991

The University of Mississippi, Oxford, Mississippi
Institutional Research Associate, University Planning and Institutional Research 1987-1989

Professional Activities

North Dakota Workforce Development Council (2009-)
North Dakota Workforce Intelligence Council (2008-)
American Council on Education Network Executive Advisory Board (2008-)
Association for Institutional Research
President (1999-2000), Board of Directors (1998-2001), Executive Committee (1992-94), Nominating Committee (2009)
Association for the Study of Higher Education
Site Selection Chair (1990-93), Board of Directors (1987-90), Program Committee (1987-89)
National Postsecondary Education Cooperative (1995-98)
Executive Committee for Banner Software Implementation, West Liberty State College
IPEDS Technical Review Panel on Most Desirable Data Products
Delaware National Faculty Study Advisory Committee
Evaluation of the Institutional Research Function. Glenville State College, Glenville, West Virginia (2001)
Evaluation of Office of Institutional Research & Planning Analysis. Virginia Tech, Blacksburg, Virginia (1997)

L. Michael Pytlik
(b)(6)
mick.pytlik@ndus.edu

Professional Experience

North Dakota University System

Executive Director of ConnectND **May 2007 – Present**

Provide direction and oversight for ConnectND, the NDUS' administrative information systems. Supervise system directors, plan for future system extensions and enhancements including implementation of a data warehouse and data presentation and analysis tools, communicate with various constituent and oversight groups, serve as a liaison to state OMB, ITD, and K-12 education agencies, oversee efforts to connect higher education data with K-12.

Director of Financial Systems **September 1995 – May 2007**

Provided leadership for operation of the NDUS financial system (ConnectND Financials), analyzed user needs and determine ways to address those needs, supervised financial system business analysts, coordinated development and maintenance tasks with financial system developers, and communicated with various constituent groups.

Led implementation of ConnectND financials, led definition and analysis of requirements for system replacement, analyzed campus business processes, recommended system changes to enhance efficiency and effectiveness, researched current and emerging accounting issues to determine their applicability to the University System. Led implementation of first NDUS data warehouse.

Director of Finance **September 1994 – September 1995**

Analyzed campus annual budgets, consolidated budgets into system-wide documents, and assisted in preparation of budget requests, testimony, and background information.

Financial Systems Trainer **September 1993 – September 1994**

Designed and delivered end-user training, analyzed campus business processes, recommended system changes to enhance efficiency and effectiveness of processes, researched current and emerging accounting issues to determine their applicability to the University System, assisted Director of Financial Systems in planning for system replacement.

Valley City State University

Accountant **March 1988 – September 1993**

Prepared internal and external financial reports, prepared accounting transactions, performed financial analysis, and prepared information for annual and biennial budgets.

Lecturer **August 1988 – May 1994**

Taught accounting and finance courses.

Professional Certifications and Training

Certified Public Accountant – North Dakota Certificate 2154
Graduate – Central Association of College and University Business Officers Collegiate Management Institute
Attendee – National Association of College and University Business Officers workshops on change management, reengineering business processes, and implementation of new administrative systems
Attendee – Educause New Directors and Directors Leadership Seminars

Education

University of North Dakota, Grand Forks, ND **December 1987**
Bachelor of Business Administration in Accounting

Professional and Community Activities

Product Advisory Group (PAG) member – Higher Education User Group (HEUG – the national user group for PeopleSoft in Higher Education)
Chair – HEUG Procure-to-Pay and Combined Financials PAGs
Presenter – PeopleSoft Connect Conference (PeopleSoft's national user conference)
Presenter – HEUG/Alliance Conference (HEUG's national user conference)
City Commissioner – City of Valley City, North Dakota
President – West Fargo Middle School and Washington Elementary PTA
Coach and Club Treasurer – West Fargo Soccer Club

Frank Snow
3403 Thunderbird Lane; Bismarck, ND 58503 W – (701) 328-2189 fsnow@nd.gov

Summary	Demonstrated achiever with exceptional knowledge of management techniques and telecommunications hardware Skilled at learning new concepts quickly, working well under pressure and meeting assigned deadlines and communicating ideas clearly and effectively. Extensive computer training (modems, ISDN, Satellite phones, STU/STE, TACLANEs, cabling, wiring, servers, and PC support), including knowledge of CISCO platforms (3600, 72XX series routers, 29XX, 35XX and 36XX switches) and networking operating systems. Experience with network management software (HP Openview, Solarwinds, CISCO works, Remedy) Experienced equipment and computer systems trainer with knowledge of course development Experience with desktop applications (including MS Office suite, MS Visio)	
Security Clearance	Top Secret (awarded Jan 1987, last updated Nov 2006, valid to Nov 2011)	
Education	Master of Information Management *Bowie State University, European Division, Heidelberg, Germany*	*May 2008*
	B.S. Computer and Information Science *University of Maryland University College, European Division, Heidelberg, Germany*	*Aug 2005*
Career History & Accomplishments	Director, Management Information Systems, *ND Dept of Public Instruction* - Develop and implement technology plan for agency - Manage $2M biannual budget - Direct multi-unit IT projects - Assist ND education agencies with IT and data issues - Supervise 12 person unit	*Apr 08 – Present*
	Director, Network Infrastructure, *USAF, RAF Mildenhall, UK*	*Aug 06 – Jan 08*

- Directed/performed daily maintenance on $40 million Foundry and CISCO based network infrastructure; including Voice over IP and network servers (classified and unclassified networks)
- Analyzed/directed projects affecting network design/modifications, ensured strict security requirements maintained; developed most cost effective solutions
- Managed $7.5K yearly budget
- Supervised/evaluated 17 technicians

Director, Deployable Infrastructure, *USAF, RAF Mildenhall, UK.* *Aug 04 – Aug 06*

- Designed and implemented CISCO based network infrastructure and REDCOM based voice networks at various deployed sites; directed and performed modification and maintenance actions
- Control $7.5M equipment account
- Primary trainer for 42 assigned team members
- Managed $100K yearly budget
- Directly supervised 23 people

Director, Airfield Systems, *USAF, RAF Mildenhall, UK* *Jan 04 – Aug 04*

- Directed the modifications and daily maintenance of airfield communications systems
- Supervised 3 sections/18 people
- Received highest rating during two Air Force level inspections

Manager, Maintenance Control Section, USAF, *Spangdahlem AB, Germany.* *Jul 03 – Jan 04*

- Directed all maintenance actions for 150-man squadron
- Monitored maintenance database, produced reports for management personnel
- Managed training of 150-man squadron
- Directly supervised 5-man team

Manager, Voice Systems, USAF, *Spangdahlem AB, Germany/Hill AFB, UT* *Dec 00 – Jul 03*

- Designed and implemented of voice networks
- Directed modification and maintenance actions for voice systems
- Control $2.5M equipment account
- Control training and monitored equipment qualifications

Voice System Technician, USAF, *Hill AFB, UT* *Jan 96 – Dec 00*

- Supervised 3; monitored training/equipment qualifications of 42 person team
- Performed daily maintenance, management/modification of $100K contingency voice communications infrastructure including telephone switches (AF proprietary), data infrastructure (Bay Network switches), bulk and point-to-point encryption systems, secure and non-secure telephone units, fax machines, network equipment and copper and fiber optics cabling

Manager, Intelligence Systems, USAF, *Osan AB, Republic of Korea* *Dec 94 – Jan 96*

- Performed modification and maintenance actions for UNIX based SunSPARC systems, display units, tape drives, encryption systems, and air to ground communications system

Telecommunications Systems Technician, USAF, *Ellsworth AFB, SD* *Dec 86 – Dec 94*

- Performed modifications and maintenance actions for ITT based mainframes, display units, disc drives, patch panels, encryption systems, and power supplies to the component level

Memberships and Affiliations	*Association for Computer Machinery* *Institute of Electrical and Electronic Engineers*

TRACY KORSMO

EDUCATION

1987 B.S. Computer Science, University of North Dakota, Grand Forks, ND

TECHNICAL EXPERIENCE and COURSE WORK

Hardware	IBM PCS and Compatible	RS6000
	IBM 9370 Model 90	Concurrent 3200MPS Series
	Ethernet and Token Ring	Sun
Operating Systems	Windows XP, 2000, UNIX, AIX, DOS, OS/2, Concurrent OS32, VMS VM/CMS, NT, AS400	
Software	ASP .Net, J2EE, Struts, UML, Clear Case, WebSphere Application Developer, SilverStream/Java, PowerBuilder, SQL, PLSQL, Fortran VII, C, C++, Dexterity, Pascal, Ada, Assembler, Erwin, PowerDesigner	
Client/Server	14+ years experience in client/server design and development; environments include MS Windows, Oracle, PowerBuilder V3 - 6.5, MS Visual Basic	
Web Application	9+ years in Web Application design and development; environments include Microsoft .Net, IBM WebSphere Application Developer, SilverStream and IBM Visual Age for Java	
DBMS	MS SQL Server, Oracle7 – 10g, Reliance, Watcom, Dbase, Sybase Sql Anywhere, DB2 for VMS, DB2 AS400, UDB 19 years experience in database design	
Recent Training	Cognos 8.4, FileNet P8 Programming and BPM, .Net ASP and VB, IBM WebSphere Application Developer, Jakarta Struts, IBM Visual Age for Java and UML from Capstone Consulting and IBM.	
Administration	Team leader roles, project management and staff management 4+ years experience as Network Administrator; environments included Token Ring, Ethernet, Netbios, TcpIp, IPX and Cisco Routers. 7+ years experience supervising programmers and network support staff 5+ years performing System Administration on Concurrent Computer systems running OS32 and Reliance RDBMS	

Positions and Projects

State of North Dakota, Information Technology Department
2007 – Present
Business Intelligence Program Manager, Enterprise Architect, Information Technology Department

Provide statewide technology planning and project oversight; develop and maintain statewide technology standards and policies; assist agencies with the implementation of best practices related to technology planning and management; provide consulting; develop guidelines and white papers; provide research coordination; support the initiatives of the CIO; act as staff to the legislative IT committee by conducting policy research and making recommendations; direct enterprise initiatives.

Responsibilities include the formation of a Business Intelligence Competency Center(BICC) and planning for a Statewide Longitudinal Data System consisting of coordinating contractors and agencies to produce a ND Roadmap for implementing the SLDS.

Team member for the preparation of grant proposals and request for proposals.
Manage the members of the BICC responsible for analysis, design and development of data warehouses; coordinate the BI cross-functional teams involved in data warehouse and BI projects.

Architectural member on the design of ND Master Data Management initiatives such as the Master Person Index being implemented by the Department of Human Services and the integration with Public Instruction Students for identifying eligible students for free and reduced meals.

State of North Dakota, Department of Public Instruction

August 2006 – 2007:
Director, Management Information Systems - Information Systems Administrator II, Department of Public Instruction

Responsibilities include the management of 12 staff members, the development and implementation of technology plans, development of technology budgets, writing proposals and approving department technology purchases. Lead a data advisory committee, which works with school districts.

Accomplishments
Written and presented testimony to the Legislature in regards to mainframe system replacements.

Co-wrote a grant with Food and Nutrition, which was awarded for the Direct Certification of TANF and Food stamp recipients.

Overseeing the rewrite of the state's student reporting system in .Net. This has included project management, contract management, large project reporting as well as overseeing and participating in the design of the product.

Co-authored the RFI and subsequent RFP for a statewide Individual Education Plan with the Special Education unit and evaluate vendor proposals.

Worked with the Department of Human Services in the evaluation of a statewide Master Client Index solution.

Collaborated with other education entities such as Career and Technical Education and the Educational Standards and Practices Board on consolidating data collection systems and improving data quality.

Forum member of the Council of Chief State School Officers and the National Center of Education Statistic of which I am a task force member of Longitudinal Data Systems

State of North Dakota, Information Technology Department

September 2003 – August 2006:
Designing and developing interfaces to FileNet P8 Enterprise Content Management and Business Process Management for multiple state agencies.

Consulted with the ND Secretary of State to replace an AS400 system with a .Net system developed in North Carolina. My responsibilities have included the review, installation and modification of the system; analysis of software, GAP analysis of business processes, cost estimates and the negotiation of license and working with NC to define a collaborative effort on software sharing. As a result of my work with the Secretary of State I have represented them at a National Conference and continue to represent them on negotiations with their software agreements.

Performed research and business analysis for the ND Department of Public Instruction to determine a means of defining a common data dictionary for DPI, as a result of the Paper Work Reduction Act. The results of the analysis produced cost analysis and system recommendations for the creation of a Common Data Dictionary. Presented findings and design at national conference hosted by the National Center of Educational Statistics in Washington DC. The design was accepted and will be available for all states to produce a common data dictionary.

Designed and developed the ND Game and Fish online boat renewals to augment their existing J2EE web application. The application was deployed in December 2004 and is currently recognizing a successful percentage of online usage.

Performed analysis, research and design for the ND Job Service Employer Claims System regarding web services and integration of heterogeneous systems.

Performed a feasibility study, which included a cost benefit plan, system requirements and vendor recommendations, for the ND Department of Public Instruction Child and Adult Care Food Program regarding online claim form submission.

Redesigned and developed the ND Secretary of States' online Business Entity Search in a J2EE architecture, originally developed in SilverStream.

Designed and implemented a J2EE WebSphere Application for the North Dakota Game & Fish Department's online Lottery System. Design and development utilized UML, IBM's WebSphere Studio V5.1, Jakarta Struts, Oracle 9i and PowerDesigner for data modeling.

May 2003 – August 2003:
Developed a J2EE WebSphere Application for the Department of Human Services (DHS) which allows

Medicaid Providers to upload and download files for DHS processing including HIPAA and Non-HIPAA compliant files. Additional project to develop an HTTPS service which allows 3rd party vendors the ability to connect to the ND State servers for processing HIPPA compliant files in a real-time environment.

eSoft Technologies, Inc. (eSoft)

May 2002 – May 2003:
Designed and implemented a Web application for the North Dakota Department of Human Services to provide shared Care Plans between all State Human Services, County Social Services, Public School Systems and select private agencies. Analysis performed using UML utilizing Use Cases, Class Diagrams, Data Models and Sequence Diagrams. This project used Jakarta Struts to implement the MVC architecture and tag libraries. This project required Facilitating meetings of large user-groups representing their respective departments throughout the state. Project management included financial, analysis, design and development.

November 2001 – May 2002:
State of North Dakota: Designed and developed the ND Motor Vehicle Online Registration System using IBM WebSphere, Visual Age for Java 4.0 and Java Server Pages for the presentation with a Model View Controller methodology. Produced UML Use Cases, Class and Sequence Diagrams for analysis and design.

May 2001 – August 2001:
Provided architecture consulting and development assistance for a Visual Basic and Microsoft ASP application used by power companies.

August 1999 – November 2002:
State of North Dakota: Performed analysis, design and development for multiple Web Applications utilizing SilverStream, Java, Oracle and DB2 environments including: a statewide IT Budget Submission System in Jrunner; Statewide Work Request System implementing an HTML front-end; an Inventory Maintenance System for the ND Parks and Recreation implementing an HTML front-end; a statewide Marriage Licensing application used in 53 counties and interfaced directly with the state's Vital Records Agency; a public application for the Secretary of State Registered Business Entity Search (AS400 DB2 database); and a public application for the State Vendor Registration System using Oracle, SilverStream and LDAP.

April 1999 – August 1999:
North Dakota Highway Patrol: Project consisted of design and development of windows socket program under PowerBuilder to interface with Wireless Mobile Data Units located within patrol units.

April 1998 – July 1999 (Vancouver BC):
Provide software development, design and analysis for Information Engineering LLP (Price Waterhouse), for their PowerComp Systems, which are PowerBuilder V5.4 – 6.5 with Oracle and DB2 platforms, specializing in the Workers Compensation Industries.

April 1999 – August 1999:
North Dakota State Department of Transportation: Performed research and analysis and prepared cost

estimates for development of law enforcement Wireless Mobile Data Units Crash system and Citation system.

Information Systems Engineering (ISE)

November 1997 – April 1999 (Bismarck ND and Vancouver BC):
Provided software development and design for Information Engineering LLP (IELLP Price Waterhouse), for their PowerComp Systems, which are PowerBuilder V5.4 – 6.5 with Oracle and DB2 platforms, specializing in the Workers Compensation Industries.

December 1998 – March 1999 (Helena MT):
Project with IELLP to provide design and development of an existing workflow application for State Government using Visual Basic 4.0.

June 1998 – December 1998:
North Dakota Legislative Counsel: Project to enhance an existing PowerBuilder product used for State Budgeting. Project consisted of analysis of current design, data modeling with Sdesigner and code changes.

May 1997 - May 1998:
North Dakota Highway Patrol: designed and developed a Daily Activity and Scheduling System in PB 5.4 and Oracle v7.3 for OS390, Sdesigner was used for data modeling.

Information Technologies Incorporated (ITI)

June 1994 - May 1997: Member of a development team implementing an Image Enabled Claims system and Medical Billing system for the North Dakota Workers Compensation Bureau. Provided analysis, design and development for the Medical Billing System conversion to client/server utilizing PowerBuilder and Oracle. Provided design and PowerBuilder development efforts for the State of Montana's Workers Compensation Claims system conversion.

November 1996: Performed network communications study and design for an ITI client implementing a multi-city infrastructure.

November 1993 - June 1994: Provided Software Quality Assurance effort for a large Windows client/server application development project. Provided network consulting for various projects and ITI clients.

University of North Dakota, Center for Aerospace Sciences (CAS) Scientific Computing Center

January 1991 - November 1993: Designed and implemented data networks according to overall organization goals. Administered, configured and maintained network servers and communications equipment in Tcplp, OSI, Netbios and Appletalk environments. Technology management: evaluated, specified and recommended personal computer, workstation and software purchases for CAS. Performed Analysis and design for airport and administrative information systems. Coordinated and maintained airport and administrative software on super-mini computers. Provided technical supervision of assistant

programmers and system operators.

December 1991 - November 1993: Development team member of Distance Learning Project. Instituted by the University of North Dakota with the FAA to broadcast aviation instruction through the use of satellites and multimedia. Responsibilities throughout the project included the design and implementation of data networks as well as multimedia workstations.

January 1988 - January 1991: Provided systems analysis for CAS Flight Training program to determine airport hardware and software requirements. Designed and coded programs in a RDBMS environment for a large aircraft scheduling and dispatch system. Provided systems administration on Concurrent super-minis consisting of network installation and configuration of database and systems software. Installed and configured personal computers and provided technical supervision of assistant programmers.

November 1988 - October 1990: USA Information Systems Project. Project to format, compress and index military parts and procurement information for inclusion onto CD-ROM database system for PC retrieval. Developed utilizing C on IBM PC and 370 architecture.

May 1985 - January 1988: Developed Flight Training, Scheduling, Billing and aircraft dispatch systems. The project was developed in a RDBMS (Reliance) environment on Concurrent super-minis.

SARAH B. LEE

Bismarck, ND

EXPERIENCE

STATE OF NORTH DAKOTA, INFORMATION TECHNOLOGY DEPARTMENT (ITD)
Bismarck, ND

Project Manager ***September 2006 - present***

- Oversee multiple information technology (IT) projects in sizes ranging from $100K to $6 million for various agencies within the State of North Dakota.
- Develop project charters, project plans, and closeout reports in compliance with North Dakota Century Code.
- Successfully monitored ongoing projects to track and predict variance in the budget and/or schedule. On average, my projects have come in at 8% under budget.
- Prepare status reports for project sponsors and the Legislative IT Committee.
- Control resources and project team members to support the needs of the budget and schedule.
- Document risks and issues and implement response plans.
- Work with State agencies on project initiation, including authoring business cases and documenting requirements.

CHECKPOINT SECURITY SYSTEMS GROUP, INC.
Chanhassen, MN

Target Project Manager ***November 2004 – September 2006***

- Managed the nation-wide Target Corporation account, which generated $20 million of installation and service business annually.
- Supervised internal team of senior account representatives and worked with them to increase job knowledge and customer service skills.
- Prepared pricing estimates and placed bids on various burglar alarm, fire alarm, and security camera installations for the Target Corporation.
- Developed and maintained professional relationships with various positions and departments of the Target Corporation in order to provide assistance with any issues or changes that occurred during projects.
- Worked with all Checkpoint internal departments to follow customer orders through the processes and guarantee that orders meet customer expectations.

Operations Support Specialist	***December 2000 – November 2004***
Internal Account Manager	***September 1999 – December 2000***
Oracle Training Supervisor	***June 1997 – present***
Senior Account Representative	***May 1997 – September 1999***
Account Representative	***May 1996 – May 1997***
Operations Administration Assistant	***September 1994 – May 1996***

SARAH B. LEE

Bismarck, ND

EDUCATION

MINNESOTA STATE UNIVERSITY, MOORHEAD
Moorhead, MN

- Bachelor of Science in Mass Communications, completed May 1994
- Minor degree in Business Management and Marketing

CERTIFICATION

- Project Management Professional (PMP), received May 2008
- CompTIA Project+ Certified Professional, received December 2006

Project Narrative

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

Attachment 1:
Title: **Apendix C** Pages: **7** Uploaded File: **C:\Documents and Settings\fsnow\Desktop\Grant Submission\Current State\Appendix C.pdf**

Appendix C: Current Progress Toward Requirements

IV. STATEWIDE LONGITUDINAL DATA SYSTEM REQUIREMENTS
Any statewide, longitudinal data system to be supported with funds made available pursuant to this competition must meet the requirements described below, which include certain system capabilities, the elements prescribed by the America COMPETES Act, and other requirements.

The following tables identify the grant requirements and North Dakota's plans to meet the requirements as well as the status of those already met.

Requirements **(7 capabilities)**	**Current Status and Efforts Supported by 2009 Grant (ndSLEDS Project)**	**Related Outcome**	**Plans**
The system must enable States to examine student progress and outcomes over time, including students' preparation to meet the demands of postsecondary education, the 21st century workforce, and the Armed Forces. Such a system must include data at the individual student level from preschool through postsecondary education and into the workforce (e.g., employment, wage, and earnings information).	The State of North Dakota Department of Public Instruction (DPI) applied for and received a $6.7 million grant award to meet the demands of K-12 longitudinal reporting via the ndSLEDS program. The grant will fund development of a K-12 data warehouse. NDUS is currently implementing a data warehouse to capture longitudinal data about postsecondary students in the state.	1. A SLDS data warehouse incorporating metrics from K-12, postsecondary and workforce will be implemented 1.1. Completion of a UI data mart	A multi-agency SLDS data warehouse will be built, leveraging the K-12 data warehouse and NDUS data warehouse as data sources. The SLDS data warehouse will include additional metrics and longitudinal data from postsecondary, Pre-K, and workforce.
The system must facilitate and	In year 4 of the 2009 grant,	2. A secure, robust	With ARRA funds,

enable the exchange of data among agencies and institutions within the State and between States so that data may be used to inform policy and practice. Such a system would support interoperability by using standard data structures, data formats, and data definitions to ensure linkage and connectivity among the various levels and types of data.	linkages will be developed with postsecondary and workforce data and outcome data will be included in the K-12 data warehouse.	system will be in production to link records based on standards for exchanging data 2.1. Documented standards for the exchanging data	linkages between postsecondary and workforce will be enhanced to include additional data elements and index fields so that in year 4 of the 2009 grant, a higher match rate with better quality data can be achieved. The ARRA grant will also fund the development of Pre-K exchanges and documented standards.
The system must link student data with teachers, i.e., it must enable the matching of teachers and students so that a given student may be matched with the particular teachers primarily responsible for providing instruction in various subjects.	The ndSLEDS project will provide for the linking of teacher and student records in year 3 of the grant.	N/A	
The system must enable the matching of teachers with information about their certification and teacher preparation programs, including the institutions at which teachers received their training.		2.2 Reports showing metrics about the correlation of teacher preparation programs to student outcomes	Linkages will be established between teachers and their teacher preparation programs. This information along with teacher-student linkages from the ndSLEDS project will make it possible to generate

			reports showing the correlation of teacher preparation programs to student outcomes.
The system must enable data to be easily generated for continuous improvement and decision-making, including timely reporting to parents, teachers, and school leaders on the achievement of their students.	The ndSLEDS project addresses K-12 reporting in year 3.	3. A robust business intelligence system will be in place for developing and publishing reports	The ARRA grant will make it possible to implement a business intelligence solution for the multi-agency SLDS and develop the necessary reports.
The system must ensure the quality and integrity of data contained in the system.	The ndSLEDS project addresses data quality training in year 3 for its source data providers.	4. The SLDS Committee and key stakeholders will be trained • Delivery of data governance training to key stakeholders • Development of a policy manual	The complex, multi-agency nature of the SLDS will require data governance training for key stakeholders, many of whom are not involved in the ndSLEDS project. A policy manual will be developed to document standards and policies.
The system must provide the State with the ability to meet reporting requirements of the Department, especially reporting progress on the metrics established for the State Fiscal Stabilization Fund and the reporting requirements included in the *EDFacts* data collection	In year 3, the ndSLEDS project will enhance DPI's ability to deliver EDFacts reporting	N/A	

and reporting system.			

Requirement **(12 data system elements)**	**Current Status and Efforts Supported by 2009 Grant (ndSLEDS Project)**	**Outcomes**	**Plans**
A unique statewide student identifier that does not permit a student to be individually identified by users of the system (except as allowed by Federal and State law)	K-12 and NDUS have their own unique statewide identifiers. A pilot project was recently completed to demonstrate the feasibility of mapping identifiers between the two systems.	N/A	
Student-level enrollment, demographic, and program participation information	This requirement is largely met through the deployment of PowerSchool student information systems in most, but not all school districts. NDUS has deployed the PeopleSoft student information system at all institutions and is in the process of deploying a data warehouse to capture information on enrolled students.	6. Automated systems will be in place to capture source data • A customer relationship management system will be implemented for the Center for Distance Learning • PowerSchool, the state standard student information system, will be implemented in 66 districts for complete state	Several key gaps remain in the collection of student level information. Funding from the ARRA grant will provide for the implementation of automated systems where there are gaps today.

		coverage • Implementation of a system to capture workforce training offered through state colleges and universities. • Implementation of an additional NDUS data warehouse module	
Student-level information about the points at which students exit, transfer in, transfer out, drop out, or complete P-16 education programs	For the most part, this data exists today or will at the end of the ndSLEDS project. Pre-K data is a notable exception.	2.3 A system in place for linking data about students as they transition from PreK to K-12 education	The ARRA grant will fund development of linkages between Pre-K and K-12.
The capacity to communicate with higher education data systems	The State is currently implementing a policy to include state student identifiers on high school transcripts so that the linkage can be captured at college enrollment.	2.4 A system in place for linking data about students as they transition from K-12 to postsecondary	The ARRA grant will fund development of work on the higher education system to capture data elements and put their systems in order for sharing data.
A State data audit system assessing data quality, validity, and reliability	Periodic audits on districts' success in meeting data standards is planned for year 4 of the ndSLEDS project	5. A data quality process will be in place • Exception reporting process implemented	The building of a multi-agency SLDS will require data quality training for additional source data providers and data quality processes will need to be

		• Audit conducted on existing data to identify improvement efforts • Delivery of data quality training to key stakeholders	implemented.
Yearly test records of individual students with respect to assessments under section 1111(b) of the Elementary and Secondary Education Act of 1965	Test records will be captured in the ndSLEDS K-12 data warehouse.	N/A	
Information on students not tested, by grade and subject	Information of students not tested will be captured in the ndSLEDS K-12 data warehouse.	N/A	
A teacher identifier system with the ability to match teachers to students	This is planned for year 3 of the ndSLEDS project.	N/A	
Student-level transcript information, including information on courses completed and grades earned	Implementation of an e-transcript solution is planned for year 4 of the ndSLEDS project.	N/A	
Student-level college readiness test scores	ACT, SAT and Advanced Placement Exam results will be captured in the K-12 data	N/A	

	warehouse in year 3 of the ndSLEDS project.		
Data that provide information regarding the extent to which students transition successfully from secondary school to postsecondary education, including whether students enroll in remedial coursework		1.3 Postsecondary transition metrics defined and captured in the SLDS data warehouse	Work to define and capture metrics related to the transition from secondary to postsecondary education will be completed with ARRA funding.
Data that provide other information determined necessary to address alignment and adequate preparation for success in postsecondary education		1.4 Postsecondary preparation and outcome metrics defined and captured in the SLDS data warehouse	Work to define and capture metrics related to the preparation of secondary students for postsecondary education will be completed with ARRA funding.

Project Narrative

Project Narrative - Appendix D Letters of Support

Attachment 1:
Title: **ND Letters of Support** Pages: **12** Uploaded File: **C:\Documents and Settings\fsnow\Desktop\Grant Submission\Letters of Support\ND Letters of Support.pdf**

State of
North Dakota
Office of the Governor

John Hoeven
Governor

November 25, 2009

Statewide Longitudinal Data System Grant Review Committee
Institute of Education Sciences
National Center for Education Statistics
1990 K Street
Washington, DC 20006

Dear Committee Members:

I am writing in support of the State Longitudinal Data System grant application and the work of North Dakota's State Longitudinal Data System Committee. The proposed EdSmart data system will benefit North Dakota by providing essential outcome data about our education and workforce programs. State policy makers, the legislature and others, will be better able to make strategic decisions to improve our educational systems. Both students and employers will benefit as we analyze the data.

North Dakota has a strong history of working across organizational boundaries to get things done. This project calls for the collaborative efforts of many agencies at the state and local level. The State Longitudinal Data System Committee, with members from key stakeholder organizations, will provide the management and coordination necessary for this project to succeed. Its members have already helped create legislation enabling the sharing of data and laid the groundwork for the EdSmart data system.

I appreciate your consideration of the grant application. Thank you for the opportunity to offer my support for this project.

Sincerely,

John Hoeven
Governor

38:63:59

600 E Boulevard Ave.
Bismarck, ND 58505-0001
Phone: 701.328.2200
Fax: 701.328.2205
www.nd.gov

Department of Public Instruction
600 E Boulevard Ave., Dept. 201, Bismarck, ND 58505-0440
(701) 328-2260 Fax – (701) 328-2461
http://www.dpi.state.nd.us

Dr. Wayne G. Sanstead
State Superintendent

Statewide Longitudinal Data System Grant Review Committee
Institute of Education Sciences
National Center for Educational Statistics
1990 K Street, NW, Room 9067
Washington, DC 20006

November 19, 2009

Dear Review Committee:

The State Longitudinal Data System application is critically important to the Department of Public Instruction to help build on and expand the capabilities of the K12 data system currently being implemented.

The initiative (titled ND EdSmart) will provide information about student preparations as they transition into postsecondary education and the workforce. It will also provide insight into early childhood development programs and their affect on student outcomes in the K12 system.

ND EdSmart will also provide the data linkages helping the agency to comply with many of the federal assurances resulting from American Recovery and Reinvestment Act (ARRA) funding.

Our agency wholeheartedly supports ND EdSmart and asks that you look favorably on this application.

Sincerely,

Wayne G. Sanstead

Dr. Wayne G. Sanstead
State Superintendent

The Department of Public Instruction does not discriminate on the basis of race, color, national origin, sex, disability, or age in its programs and activities. For inquiries regarding nondiscrimination policies, please contact: David G. Massey, Assistant Superintendent, Department of Public Instruction, 600 E Boulevard Avenue, Dept 201, Bismarck, ND 58505-0440, 701-328-3600.

JOB SERVICE North Dakota
jobsnd.com

John Hoeven, Governor • Maren L. Daley, Executive Director

PO Box 5507 • Bismarck, ND 58506-5507

November 18, 2009

Statewide Longitudinal Data System Grant Review Committee
Institute of Education Sciences
National Center for Education Statistics
1990 K Street
Washington, DC 20006

LETTER OF SUPPORT FOR THE ND EdSmart DATA SYSTEM, A GRANT APPLICATION FOR US DoE ARRA GRANT FUNDS

Dear Grant Review Committee:

Job Service North Dakota (JSND) is pleased to support the grant application for ND EdSmart, a robust statewide longitudinal data system designed to increase the capabilities for North Dakota's educational data tracking.

Job Service has been a strong collaborator in statewide efforts to develop a mechanism for tracking, warehousing and reporting educational data since the inception of the FIND-ET (Follow-up Information on North Dakota Education and Training) system. Our engagement in FIND-ET and State Longitudinal Data System planning reflects our belief in the value of comprehensive, long-term tracking to improve planning and performance. We see many opportunities for improving our assistance to the state's career planners, educators, students, employers, current and future workers, and policy makers as a result of the depth and breadth of education and workforce data made available through the EdSmart project.

North Dakota has been in need of comprehensive occupational supply and demand comparison data for a considerable time. This, as well as talent pipeline identification and career tracking are just some of the opportunities we see for improved workforce intelligence resulting from EdSmart. In addition, matching of educational tracking data with our unemployment insurance claimant and wage record files could result in new research on the educational and work characteristics of the unemployed. These types of data will be invaluable to Job Service and our partners as we strive to meet the workforce needs of North Dakota.

Job Service is committed to helping North Dakota and the EdSmart project succeed in increasing coordinated data collection and analysis to support long term improvements to education and workforce development.

Should you have any questions, please call me at 701-328-2836.

Sincerely,

Maren L. Daley
Executive Director

701.328.2825 (Voice) • 800.366.6888 (TTY Users – Relay ND) • 701.328.4000 (FAX)
Job Service North Dakota is an equal opportunity employer/program provider.
Auxiliary aids and services are available upon request to individuals with disabilities.

North Dakota
DEPARTMENT OF COMMERCE

Community Services Economic Development & Finance Tourism Workforce Development

November 19, 2009

Statewide Longitudinal Data System Grant Review Committee
Institute of Education Sciences
National Center for Educational Statistics
1990 K Street, NW, Room 9067
Washington, DC 20006

To Whom It May Concern:

This letter is provided to demonstrate our support for the ND EdSmart initiative being submitted on behalf of the North Dakota State Longitudinal Data System (SLDS). The SLDS is designed to enhance North Dakota's ability to provide education and workforce accountability reporting to policy makers, leaders and stakeholders.

ND EdSmart initiative is an important component designed to provide the planning, development, and coordination efforts that are required for a data repository that unifies key data from public PK-12, higher education, and workforce development programs and having capacity to provide the analytical insight to ensure that students transition successfully from K-12 to higher education and the workforce and to foster educational improvement statewide.

The ND EdSmart data system builds on the capabilities of the K-12 data system currently being implemented in North Dakota. ND EdSmart will meet the required capabilities and elements not met by that K-12 system.

The North Dakota Department of Commerce is committed to support a statewide system for collecting and sharing longitudinal data, necessary to meet the management information needs of stakeholders and partners of North Dakota education, training, and workforce delivery system.

The K -12 education system is the primary feeder to the pipeline for the workforce of the future. A Longitudinal Data Warehouse with the capacity to support integrated performance information and shared accountability for the development of the talent is critical to our State's ability to compete.

Thank you for the opportunity to support this initiative and the funding application of the North Dakota Information Technology Department.

Sincerely,

Shane Goettle
Commissioner

DEPARTMENT OF CAREER AND TECHNICAL EDUCATION

Wayne Kutzer
STATE DIRECTOR &
EXECUTIVE OFFICER

State Capitol 15th Floor
600 E Blvd. Ave Dept 270
Bismarck ND 58505-0610
701-328-3180
701-328-1255 (Fax)

E-mail:
cte@nd.gov

Websites
www.nd.gov/cte
www.nd.gov

[redacted]

[redacted]

Wayne Kutzer

[redacted]

north dakota department of human services

Children and Family Services Division

(701) 328-2316
Toll Free 1-800-245-3736
Fax (701) 328-3538
ND Relay TTY 1-800-366-6888

John Hoeven, Governor
Carol K. Olson, Executive Director

November 18, 2009

Lisa Feldner, CIO
State Information Technology Department
State Capitol
600 East Boulevard Avenue
Bismarck, North Dakota 58505

RE: Grant Application to Support the North Dakota EdSmart Data System

Dear Dr. Feldner:

I am pleased to provide a letter in support for the funding proposal to build a state longitudinal data system to enhance the ability and provide accountability for reporting among the state leadership. The EdSmart data system will combine an easy–to-use business intelligence tool and a state data warehouse containing selected data from multiple agencies that will empower state leaders with answers to questions that are necessary for the fiscal mapping for education and workforce goals.

As part of the project, data linkages will be built to identify between K-12 and post secondary records with information about preparation for and transition to college. The data linkages will also be established to link K-12 and post secondary students (graduates and drop-outs) to employment records and the military. The North Dakota Head Start-State Collaboration Office is most encouraged with the prospect of planning, the development, and the coordination with the Pre-K linkages to the K-12 data systems across the state agencies. Tracking the enrolled Head Start and Early Head Start children through a student identifier number will provide information regarding the investment benefits of early childhood intervention and prevention programs in our state. This will be accomplished through early childhood assessments and child outcomes.

The North Dakota Head Start and Early Head Start programs are among the best in the national and the program directors have longed for an opportunity to share their successes through a state wide data system. The Head Start-State Collaboration Office wholeheartedly supports this project. I wish you the best in this endeavor and look forward to participating in partnership as the EdSmart data system is implemented across the State.

Sincerely,

Linda Rorman

Linda Rorman
Head Start-State Collaboration Office

PR/Award # R384A100012

Education Standards and Practices Board
2718 Gateway Avenue, Suite 303
Bismarck, ND 58503-0585
(701) 328-9641 Fax (701) 328-9647
http://www.nd.gov/espb

November 17, 2009

Lisa Feldner, CIO
Information Technology Department
State Capitol
Bismarck ND 58505

Dear Dr. Feldner:

The North Dakota Education Standards and Practices Board supports the North Dakota application for the U.S. Department of Education American Recovery and Reinvestment Act grant funds. Funds will be used to development the state longitudinal data system, ND EdSmart.

The Education Standards and Practices Board, independent educator licensing board for the State of North Dakota, has in cooperation with the ND Department of Public Instruction begun development of a SQL data system that will provide data for teacher licensure, teacher preparation program, and some aspects of educator professional development. The ND EdSmart system will provide the link for student data with teacher data.

Thank you for the consideration given this proposal.

Sincerely,

Janet Placek Welk, PhD
Executive Director

NORTH DAKOTA
EDUCATIONAL TECHNOLOGY COUNCIL

P.O. Box 5036
1510 12th Avenue N.
Fargo, ND 58105-5036

Phone: 701-231-6032
Fax: 701-231-6050

danpullen@nd.gov

www.ndetc.k12.nd.us

November 20, 2009

Statewide Longitudinal Data System Grant Review Committee
Institute of Education Sciences
National Center for Educational Statistics
1990 K Street, NW, Room 9067
Washington, DC 20006

On behalf of the North Dakota Educational Technology Council (ETC), I welcome the opportunity to support the efforts of the State Longitudinal Data System Committee's NCES grant application. Members of the ETC played an active role in shaping the final grant application.

The entire initiative will have a positive impact on North Dakota students by increasing the capacity of the K12 data system currently being implemented and linking this to both post-secondary and workforce. I have highlighted two items of particular interest to ETC.

First is the design and construction of a Virtual School Management System for North Dakota's Center for Distance Education (CDE). CDE provides a means for students to take courses not offered at their local school or to take credits needed for graduation. The proposed system will allow for the collection and reporting of student information in a more efficient, effective and secure manner. This data will be integrated with other data currently collected by the state (utilizing the statewide unique student identifiers) to provide a more complete picture of student performance.

Second is the temporary increase of personnel involved in the statewide implementation of a common student information system, PowerSchool. The accurate input of data forms the ground work for any effective data system. North Dakota realizes this and mandated PowerSchool as the statewide student information system. At the current rate the implementation will take approximately four years (lasting into 2013). The additional staff will be utilized during the grant period and should have all schools on PowerSchool by the end of 2011. At the end of the grant period, these staff would shift into a training role to assist schools in turning the newly acquired data into usable information and actionable items to improve student outcomes.

Again, I would like to offer my continued support to the SLDS committee and their efforts to implement a Statewide Longitudinal Data System.

Sincerely,

Art Conklin, Chair
North Dakota Educational Technology Council

PR/Award # R384A100012

NDATL
North Dakota Association of Technology Leaders

November 20, 2009

Statewide Longitudinal Data Systems Grant Review Committee
National Center for Educational Statistics
1990 K. Street, NW
Washington, DC 20006

Dear Committee Members:

Our organization, the North Dakota Association of Technology Leaders, is excited to learn that the Department of Public Instruction has prepared a project grant application for a Statewide Education Longitudinal Data Warehouse. This data warehouse will play a major role in helping local schools and staff address student achievement issues and aid them in decision making. The data base will also be extremely useful in assisting schools in providing timely and much needed educational data to the legislature and other decision makers. This warehouse will help to solve many of the school data issues we have had in the state.

We fully support the department's application for the Statewide Education Longitudinal Warehouse.

Thank you for your consideration of this grant application.

Sincerely,

Rae Ann Vandrovec

Rae Ann Vandrovec
President of NDATL
207 2nd Ave SE
Jamestown, ND 58401

North Dakota
DEPARTMENT OF COMMERCE

Community Services Economic Development & Finance Tourism Workforce Development

November 12, 2009

Statewide Longitudinal Data System Grant Review Committee
Institute of Education Sciences
National Center for Education Statistics
1990 K Street
Washington, DC 2006

To Whom It May Concern:

This letter is provided to demonstrate our support for the North Dakota State Longitudinal Data System (SLDS) which is designed to enhance the State's ability to provide accountability reporting to policy makers, leaders and stakeholders.

ND EdSmart initiative would be a key component designed to provide the planning, development, and coordination efforts that are required to realize a data repository that unifies key data from public PK-12, higher education, and workforce development programs and provides the analytical insight to ensure that students transition successfully from K-12 to higher education and the workforce and to foster educational improvement statewide.

The EdSmart data system – represents a powerful combination of an easy-to-use business intelligence tool and a state data warehouse populated with select data from multiple agencies. This will empower and enlighten state leaders by providing answers to questions that are essential for meeting North Dakota's education and workforce goals.

The ND EdSmart data system will build on the capabilities of the K-12 data system currently being implemented in North Dakota. ND EdSmart will meet the required capabilities and elements not met by that K-12 system.

The North Dakota Workforce Development Council (State and Local Workforce Investment Board) has long had a commitment for and strongly supports a statewide system for collecting and sharing longitudinal data, necessary to meet the management information needs of stakeholders and partners of North Dakota education, training, and workforce delivery system.

The K -12 education system is the primary feeder to the pipeline for the workforce of the future. A Longitudinal Data Warehouse with the capacity to support integrated performance information and shared accountability for the development of the talent is critical to our State's ability to compete.

Thank you for the opportunity to support this initiative and the funding application of the North Dakota Information Technology Department.

Sincerely,

James J. Hirsch
Director

NORTH DAKOTA
UNIVERSITY SYSTEM

The Vital Link to a Brighter Future

November 25, 2009

Statewide Longitudinal Data System Grant Review Committee
Institute of Education Sciences
National Center for Educational Statistics
1990 K Street, NW, Room 9067
Washington, DC 20006

Dear Committee Members:

On behalf of the North Dakota University System, I am pleased to provide this letter in support of the North Dakota Department of Public Instruction grant application for development of the ND EdSmart Statewide Longitudinal Data System. This system, with appropriate business intelligence products, will aid decision-makers at all levels by providing information to analyze background and performance of students as they progress through K-12 to higher education and the workforce. The North Dakota University System will work with the Department of Public Instruction and the other participants to ensure a successful project.

Establishing a robust Statewide Longitudinal Data System is essential to creating the linkages between K-12 and higher education in order to provide information about the preparation for and transition to college, to identify teachers with the postsecondary program where they received their degree, and to track students after they leave K-12 or higher education and enter the workforce. The North Dakota University System has provided for the initial development of its data warehouse but through this grant it will be able to add critical data associated to admission and recruitment. In addition, a system will be acquired and implemented to collect and provide data from its institution's TrainND efforts related to workforce development and through that system to the ND EdSmart SLDS. This will allow DPI and NDUS to continue its strong partnership in preparing the workforce of the future.

The North Dakota University System has been a participant in the State's effort to plan for a State Longitudinal Data System for the past few years. This grant submission is the culmination of those efforts and has my full support. I urge the Review Committee to recognize the planning effort and the level of collaboration and opportunity provided by the grant.

Thank you for your consideration of the proposal. Please contact me directly should you have any questions at 701-328-2963.

Sincerely,

William S. Goetz

William Goetz
Chancellor

g:\terry\goetz\letters\statewide longitudinal letter of support 11-25-09.doc

State Capitol - 600 E Boulevard Ave Dept. 215, Bismarck ND 58505-0230
Phone: 701.328.2960 Fax: 701.328.2961 E-mail: NDUS.office@ndus.edu Web: www.ndus.edu

e10

PR/Award # R384A100012

Information Technology Department

600 E Boulevard Ave., Dept 112 • Bismarck, ND 58505 • (701) 328-3190

Statewide Longitudinal Data System Grant Review Committee
Institute of Education Sciences
National Center for Educational Statistics
1990 K Street, NW, Room 9067
Washington, DC 20006

On behalf of the North Dakota Information Technology Department (ITD), I welcome the opportunity to support the North Dakota State Longitudinal Data System Committee's NCES grant application.

ITD has and will play a major role in the proposed longitudinal data system. ND has a consolidated technology infrastructure where all state government data systems are hosted and maintained at ITD. Likewise, ITD maintains the state network that connects all state agencies, political subdivisions, higher education institutions, and K-12 schools. In addition, ITD maintains and supports PowerSchool, the mandated student information system, for all K-12 schools in ND. The synergies created by this consolidation of data, systems, expertise, and governance will allow ND to "hit the ground running" in the creation and implementation of a statewide longitudinal data system as much of the preparatory work has already been done.

A team from ITD has been working with the State Longitudinal Data System Committee for three years to gather input, study security and privacy implications, raise awareness, and provide technology expertise. I believe the committee, together which ITD, have developed a strategic roadmap that will lead to a successful longitudinal data system. In addition, the committee has a strong and positive relationship with the stakeholders including the office of the governor, state agencies, the education community, and the legislature.

In closing, I am ensuring ITD's commitment and long-term support for the statewide longitudinal data system.

Sincerely,

Lisa Feldner

Lisa Feldner, PhD, CIO

Budget Narrative

Budget Narrative - Budget Justification

Attachment 1:
Title: **ND SLDS Budget Narrative** Pages: **4** Uploaded File: **ND SLDS budget narrative.pdf**

7. The Budget Narrative (Justification):

The following section outlines the budget for each of the six outcomes proposed in the application. Personnel costs are not being funded by the grant. In-kind personnel cost estimates are listed in Appendix A.

Outcome 1: A SLDS data warehouse incorporating metrics from K-12, postsecondary and workforce will be implemented.

	Year 1	Year 2	Year 3	Total
Budget Category				$0
Personnel				$0
Fringe Benefits				$0
Travel	$6,000	$6,000	$6,000	$18,000
Equipment	$794,000	$184,200	$174,200	$1,152,400
Supplies				$0
Contractual	$558,542	$562,308	$403,218	$1,524,068
Construction				$0
Other	$25,000			$25,000
Total	$1,383,542	$752,508	$583,418	$2,719,468

Travel includes one mandatory trip for each of two senior project staff to attend a two-day meeting each year in Washington, D.C.

The Equipment category includes funding for development, test and production data warehouse servers, disk storage, database licenses, data integration servers (development, test and production) and data integration software as listed in ED524 Section C.

The Contractual category includes consulting by ITD and outside contractors. Estimated costs are based on the Consultant Resource Allocation Table found in Appendix A. Outside consulting is typically procured using fixed-priced contracts based on specific deliverables.ITD and other contractors will be used to analyze requirements, develop the data model, build the data warehouse, develop ETL and install the hardware and software.

The Other category includes the ITD charge for Large Project Oversight, a state mandated requirement for projects of this size to ensure best practices in project management are followed.

Outcome 2: A secure, robust system will be in production to link records based on standards for exchanging data.

The Contractual category includes consulting by ITD and outside contractors. ITD and other contractors will be used to analyze requirements, develop the portal and required reports and install the hardware and software.

Outcome 4: The SLDS Committee and key stakeholders will be trained.

	Year 1	Year 2	Year 3	Total
Personnel				$0
Fringe Benefits				$0
Travel				$0
Equipment				$0
Supplies				$0
Contractual	$226,637	$169,825	$135,456	$531,917
Construction				$0
Other				$0
Total	$226,637	$169,825	$135,456	$531,917

The Contractual category includes the consulting costs for training stakeholders, developing a policy manual and facilitating governance meetings.

Outcome 5: A data quality process will be in place.

	Year 1	Year 2	Year 3	Total
Budget Category				0
Personnel				$0
Fringe Benefits				$0
Travel				$0
Equipment	$150,000	$30,000	$30,000	$210,000
Supplies				$0
Contractual	$121,769	$120,754	$182,180	$424,703
Construction				$0
Other				$0
Total	$271,769	$150,754	$212,180	$634,703

The Equipment category includes licensing for data quality software.

The Contractual category includes consulting to conduct data quality audits, develop a data quality process, deliver data quality training and develop exception reports.

Outcome 6: Automated systems will be in place to capture source data

	Year 1	Year 2	Year 3	Total
Budget Category				0
Personnel	$0	$0	$0	$0
Fringe Benefits	$0	$0	$0	$0
Travel	$0	$0	$0	$0
Equipment	$562,111	$399,577	$45,737	$1,007,425
Supplies	$0	$0	$0	$0
Contractual	$712,905	$468,685	$422,768	$1,604,358
Construction	$0	$0	$0	$0
Other	$0	$0	$0	$0
Total	$1,275,016	$868,262	$468,505	$2,611,783

The budget for Outcome 6 is organized around the four source systems that will be implemented to improve the capture of source data. Project management consulting of $28,305 each year is included to coordinate these projects with the other outcomes. Consulting activities include the development of linkages from these systems to the ND EdSmart data system.

- $472,782 in consulting is included for the implementation of a web-based Virtual School Management System for North Dakota Center for Distance Education (ND CDE). $256,120, $130,020, and $113,642 is included in years 1, 2 and 3 respectively.
- $159,360 per year is included in the Contractual category for Edutech to provide two FTE for the accelerated implementation of PowerSchool student information system in all schools in North Dakota.
- The budget to implement a system to capture workforce training offered through state colleges and universities includes $240,115 in equipment for hardware and software. Contractual costs include $388,582 to cover implementation consulting, customization and integration. $189,120, $78,000 and $121,462 is included in years 1,2 and 3 respectively. NDUS is providing $231,800 in in-kind resources in the form of a system programmer, full time for three years, and associated operational costs.
- Implementation of an additional NDUS data warehouse module will require $767,310 in equipment and $180,000 in contractual services. NDUS is supplying in-kind resources of $674,600 in hardware and software. Grant funding will provide $80,000 in year 1 and $100,000 in year 2 for consulting to implement the module. The equipment budget, $321,996 in year 1, $399,577 in year 2 and $45,737 in year 3 will provide additional licensing for database software, BI licenses, and disk storage required for implementation. In-kind resources cover the purchase of the data warehouse module, servers and partial funding of BI and database licenses.

Budget Narrative

Budget Narrative - ED 524 Section C Spreadsheet

Attachment 1:
Title: **ED524 Section C** Pages: **1** Uploaded File: **C:\Documents and Settings\fsnow\Desktop\ED524 Section C.pdf**

Grant Application CFDA Number 84.384: North Dakota EdSmart Data System
ED 524 - Section C
Budget Detail by Year

Budget Category	Item Breakdown	Year 1	Year 2	Year 3	Total	
Personnel Total		**$0**	**$0**	**$0**	**$0**	
Fringe Benefits Total		**$0**	**$0**	**$0**	**$0**	
Travel	Travel to Grantee meeting (2 senior people 1/year)	$6,000	$6,000	$6,000	$18,000	
	SME Travel and expense 2 meetings per year 6 peo	$7,620	$7,620	$7,620	$22,860	
Travel Total		**$13,620**	**$13,620**	**$13,620**	**$40,860**	
Equipment	Warehouse Servers/ License/ Storage	$10,000	$10,000	$0	$20,000	
	Database licenses	$410,000	$90,200	$90,200	$590,400	
	Storage	$54,000	$24,000	$24,000	$102,000	
	Data Integration	$300,000	$60,000	$60,000	$420,000	
	Data Integration hardware	$20,000			$20,000	
	MDM licenses	$350,000	$70,000	$70,000	$490,000	
	MDM Hardware	$20,000			$20,000	
	BI Hardware	$15,000	$15,000	$0	$30,000	
	BI Licenses	$490,400	$107,888	$107,888	$706,176	
	Portal Hardware	$20,000			$20,000	
	Portal Licenses	$46,425	$2,040	$2,040	$50,505	
	Data Quality license module	$150,000	$30,000	$30,000	$210,000	
	Workforce training software	$240,115			$240,115	
	NDUS servers and BI software	$321,996	$399,577	$45,737	$767,310	All software except $87500 in yr 1
Equipment Total		**$2,447,936**	**$808,705**	**$429,865**	**$3,686,506**	
Supplies Total		**$0**	**$0**	**$0**	**$0**	
Contractual	ND EdSmart Consulting	$1,204,532	$1,422,768	$975,242	$3,602,543	
	ITD	$678,436	$678,996	$650,360	$2,007,792	
	Powerschool Implementors	$159,360	$159,360	$159,360	$478,080	
	STARS Contractor	$74,880	$23,040	$11,520	$109,440	
	CDE Contract	$250,000	$100,000	$52,500	$402,500	
	NDSU Recruitment and Admin Consulting	$80,000	$100,000		$180,000	
	Workforce Training Consulting	$183,000	$78,000	$68,000	$329,000	
Contractual Total		**$2,630,208**	**$2,562,164**	**$1,916,982**	**$7,109,354**	
Construction Total						
Other Total		**$25,000**			**$25,000**	
Total Direct Costs		**$5,116,764**	**$3,384,489**	**$2,360,467**	**$10,861,720**	
Indirect Costs		**$398,742**	**$249,216**	**$171,505**	**$819,462**	DPI indirect amount (12%) applied to the following: -All travel -Any equipment under $5K (there was none in that category) -All software licenses -All ITD contractual amounts, including PowerSchool implementors -The first $25K of any other contract -All of "other" category
Total Costs		**$5,515,507**	**$3,633,705**	**$2,531,972**	**$11,681,183**	
Indirect Components						
ITD and PS Contractual		$837,796.0	$838,355.8	$809,720.0		
Software		$2,221,436	$999,820	$405,865		
# of Contracts		9	9	8		The number of contracts was estimated at 5 for ND EdSmart Consulting; 1 each for each of the first 5 outcomes plus the last four listed individually (STARS, CDE, NDUS and Workforce Training.