Project Startup Report

Presented to the IT Committee September 9, 2015

Project Name: ND Immunization Information System - NDIIS

Agency: Department of Health

Business Unit/Program Area: Disease Control

Project Sponsor: Molly Howell

Project Manager: Kris Vollmer

Project Description

The North Dakota Immunization Information System (NDIIS) is a confidential, population-based, computerized information system that attempts to collect vaccination data about all North Dakotans. The NDIIS is an important tool to increase and sustain high vaccination coverage by consolidating vaccination records of children from multiple health care providers, providing immunization coverage rate reports for providers, and providing official immunization forms. North Dakota state law requires that providers enter all childhood immunizations into the NDIIS. Children are entered into the NDIIS at birth, through a linkage with electronic birth records. An NDIIS vaccination record can also be initiated by a health care provider at the time of a child's first immunization. The NDIIS has the capability of collecting vaccination data on adult patients, as well as children.

Business Needs and Problems

The NDDoH needs to provide, maintain and enhance the NDIIS and ensure long-term sustainability of the immunization registry. In order to comply with federal grant requirements the NDDoH has identified the following business needs and/or problems:

- Provide operational and infrastructure support to increase (and maintain) NDIIS interoperability with EHRs.
- Improve (and maintain) data quality in the NDIIS.
- Improve (and maintain) timeliness of data transferred between NDIIS and EHRs.
- Enhance CDSi by providing real-time-forecasting messages to EHRs
- Implement functionality for pharmacies and non-typical healthcare providers to submit immunization data to the NDIIS.
- Improve system infrastructure and implement database changes to ensure system sustainability
- Conduct provider outreach.

Key Metrics		
Project Start Date	Project End Date	Original Baseline Budget
05/01/2015	04/30/2018	$3,574,410.11

Objectives	
Project Objectives	Measurement Description
By September 29, 2015, complete the objectives identified in the PPHF 2012 grant: https://share.nd.gov/pmo/doh/pphf2014interop/Reference%20Documents/ProgramArea2_Narrative.doc	Progress towards achievement of the objectives will be determined by the completion of the objectives identified in the PPHF 2012 grant narrative.
By December 31, 2015, complete the objectives identified in the Sentinel Site – Pan Flu grant: https://share.nd.gov/pmo/doh/pphf2014interop/R	Measure the objectives as identified in the Sentinel Site – Pan Flu grant narrative.

eference%20Documents/IIS%20Pandemic%20Preparedness_Narrative.doc	
By September 29, 2016, complete the objectives identified in the PPHF 2014 grant: https://share.nd.gov/pmo/doh/pphf2014interop/Reference%20Documents/Narrative.doc	Progress towards achievement of the objectives will be determined by the completion of the objectives identified in the PPHF 2014 grant narrative.
By September 29, 2017, complete the objectives identified in the Sentinel Site Plan-Capacity grant: https://share.nd.gov/pmo/doh/pphf2014interop/Reference%20Documents/IIS%20Capacity_Narrative%20MH.doc	Progress towards achievement of the objectives will be determined by the completion of the objectives identified in the Sentinel Site Plan-Capacity grant narrative.

Cost/Benefit Analysis
The NDIIS is funding by federal grants. In order to continue to receive grants it is imperative to complete the identified objectives of each grant that's been awarded and that the Department of Health does not continually return funds due to an inability to expend.

Key Constraints or Risks

• Based on the nature of the grants, all funds must be expended as follows:
  ○ PPHF 2012: 09/30/2015
  ○ Sentinel Site _ Pan Flu: 12/31/2015
  ○ PPHF 2014: 09/29/2016
  ○ Sentinel Site _ Capacity: 09/29/2017
• NMIC hosts the registry and must provide technical expertise
• This project must comply with all grant specifications and federal reporting requirements

Project Startup Report

Project Name: Management Information System Upgrade (MIS Upgrade)

Agency: Department of Health (DoH)

Business Unit/Program Area: Women, Infants, and Children (WIC)

Project Sponsor: Kristi Miller

Project Manager: Brandi Fagerland

Project Description
The North Dakota (ND) and Iowa (IA) WIC Programs are jointly upgrading their developed management information systems (WICnet in ND and IWIN in IA) to the Mountain Plains State Users Group System (MPSC). The two states are in a unique position for an upgrade due to the fact that their systems served as the baseline for the MPSC system. After a thorough review and comparison of the MPSC system functionality to the current systems the states recognize that an upgrade is the logical solution to updating the MIS. The states believe an upgrade will be a lower cost alternative, requiring less time and effort to transition to the MPSC system for the two states. The streamlined upgrade will also better position the states for Electronic Benefits Transfer (EBT) and for a long term MIS solution as part of a User's Group (and the inherent cost sharing, etc.). The concept of an upgrade (versus a full system transfer) should allow the states to move to the MPSC system in a more efficient timeframe and with less cost than a full system transfer. A Request for Proposal (RFP) was conducted for a contractor to assist with this upgrade. Ciber was awarded this contract.

Business Needs and Problems
1. USDA/FNS has mandated the implementation of EBT as the delivery method of food benefits for WIC by October 1, 2020. Before North Dakota WIC can move to EBT, the MIS needs to be upgraded or modified. 2. North Dakota WIC needs an upgraded MIS system. The current MIS is 9 years old and may be reaching end of life in the next few years. The platform of the system may eventually not be supported any further causing the system to be unuseable or having to update to newer platforms. 3. Costs for a maintenance and operations contractor for their MIS system must be affordable for North Dakota WIC. Paying a maintenance and operations contractor takes up a considerable amount of the North Dakota WIC Nutrition Services and Administration (NSA) budget. North Dakota WIC is required to go out for bid every 5 years for this contract, and had to re-release an RFP because all the proposals came back unaffordable. After re-releasing the RFP, North Dakota WIC was able to secure a maintenance and operations contractor that was affordable but the contract expires in 2017. 4. North Dakota WIC would like to move to a completely paperless environment. North Dakota WIC was hoping to be completely paperless when WICnet was implemented in 2006, however, there are still some forms, including check registers that staff need to keep on file.

Key Metrics		
Project Start Date	Project End Date	Original Baseline Budget
03/16/2015	01/14/2016	$466,832

Objectives	
Project Objectives	Measurement Description
Business Need/Problem 1: USDA/FNS has mandated the implementation of EBT as the delivery method of food benefits for WIC by October 1, 2020. Before North Dakota WIC can move to EBT, the MIS needs to be upgraded or modified. Objective 1.1: North Dakota WIC will release an RFP to hire an Upgrade and	Measurement 1.1.1: The proposals will be evaluated to select an Upgrade and Implementation Contractor Measurement 1.1.2: North Dakota WIC will negotiate and sign a contract with the selected contractor to start the project

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Implementation Contractor to upgrade to the MPSC system	
Business Need/Problem 1: USDA/FNS has mandated the implementation of EBT as the delivery method of food benefits for WIC by October 1, 2020. Before North Dakota WIC can move to EBT, the MIS needs to be upgraded or modified. Objective 1.2: The selected Contractor will upgrade and implement the MPSC system for North Dakota WIC	Measurement 1.2.1: During UAT, the selected Contractor will deliver a data element mapping document to North Dakota WIC to confirm that the data conversion process is completed and the data is verified for quality Measurement 1.2.2: UAT training and testing is scheduled and completed and there are no remaining critical issues open Measurement 1.2.3: The contractor will provide the state and local staff with training on the use and navigation of the MPSC system. After training, attendees will be given homework scenarios to complete upon return to their offices. The state office will check in with agencies on their completion of the homework scenarios and will identify further needs for training. Measurement 1.2.4: The contractor will assist ITD in installing the system on North Dakota's environment and the system will be rolled out statewide
Business Need/Problem 2: North Dakota WIC needs an upgraded MIS system. The current MIS is 7 years old and may be reaching end of life in the next few years. The platform of the system may eventually not be supported any further causing the system to be unuseable or having to update to newer platforms. Objective 2.1: Upgrade the North Dakota WIC system to the MPSC system	Measurement 2.1.1: On the scheduled go-live weekend, the old system is shut down and the new system is brought up and determined to be working properly Measurement 2.1.2: It is anticipated that the WICnet help desk calls will be reduced by half upon implementation of the MPSC system. On average, currently the help desk gets fifty to seventy-five help desk calls per month. 3 months after implementation of the new system, help desk staff will be surveyed to determine if the number of help desk calls has reduced by half.
Business Need/Problem 3: Costs for a maintenance and operations contractor for their MIS system must be affordable for North Dakota WIC. Paying a maintenance and operations contractor takes up a considerable amount of the North Dakota WIC Nutrition Services and Administration budget. North Dakota WIC is required to go out for bid every 5 years for this contract, and had to re-release an RFP because all the proposals came back unaffordable. After re-releasing the RFP, North Dakota WIC was able to secure a maintenance and operations contractor that was affordable but the contract expires in 2017. Objective 3.1: Join the MPSC Users Group	Measurement 3.1.1: North Dakota WIC will apply to become part of the Users Group and sign the charter
Business Need/Problem 4: North Dakota WIC would like to move to a completely paperless environment. North Dakota WIC was hoping to be completely paperless when WICnet was implemented in 2006, however, there are still some forms, including check registers that staff need to keep on file. Objective 4.1: By upgrading to MPSC, North Dakota WIC will eliminate all paper forms	Measurement 4.1.1: Scanners will be purchased for each local agency to scan medical forms, court documents, etc.and 100% of local agencies will be using the scanners after system implementation Measurement 4.1.2: Electronic signature pads will be purchased by each local agency to allow the participants to sign for their checks, and sign all other needed forms and 100% of local agencies will be using the pads after system implementation

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Cost/Benefit Analysis
The current operating systems in the states (North Dakota WICnet and Iowa IWIN) were a joint effort between the two state WIC programs. This project was the first time two states combined efforts and resources for the development of a WIC management information system. The project was initially planned as a transfer project, (transferring in the Pennsylvania QuickWIC system with minor modifications), but during the design sessions it was determined that there were a multitude of differences from the way Iowa and North Dakota WIC "do business" compared to Pennsylvania WIC. The transfer project then became significant system development. In June 2003, after a competitive procurement led by Iowa, the two states signed contracts with Ciber, Inc. Iowa rolled out in late 2005 and North Dakota WIC rolled out statewide in January 2006 with the system. Significant changes from the original scope of the project included the switch to .NET architecture and a number of other enhancements. In 2008 both states contracted with Ciber for extended warranty and system support. As a shared contract between two states, the states shared the cost of development, etc. based on the size of the programs, with Iowa assuming 80% of costs and North Dakota, 20%. Now, the options for North Dakota WIC to get an updated system were: Modify their current system, transfer in a State Agency Models (SAM) system, build a new system, or transfer in a non-SAM system. The cost to modify the current system for EBT has been estimated at over a million dollars, and to build a new system would most likely be double that cost (not to mention the time it would take to develop a new system). The most cost-effective and timely solution would be to transfer in a system that is already in use in another state and is EBT ready. The United States Department of Agriculture (USDA) will provide funding to those transferring a SAM system at a level of 100%, but will only fund up to 75% for a non- SAM system. Given that, North Dakota has chosen to transfer to a SAM system, there are only two SAM systems available for transfer to North Dakota WIC – SPIRIT & MPSC. Because the MPSC system was the basis for the current system that North Dakota WIC has (WICnet), it was a natural fit. After a complete review of the MPSC system, North Dakota chose the MPSC system and prepared an Implementation Advanced Planning Document (IAPD). North Dakota WIC received approval of the IAPD from the USDA Food and Nutrition Service (FNS) and has been admitted to the MPSC User's Group. There is no charge for taking the MPSC system; however, there will be a cost for Ciber as an implementation contractor. After implementation, North Dakota will be charged for the maintenance and operations of the system along with the other states in the User's Group.

Key Constraints or Risks
Risk: North Dakota WIC is doing this project jointly with the state of Iowa and Iowa is paying the majority of costs. Impact: If something happens to Iowa's funding or Iowa's staff, the project could come to stop. Response: Accept Risk: North Dakota WIC will need to follow the new major project process that was put into century code and made effective as of August 1, 2013. Impact: Due to following the new major project process and having to work with another state (Iowa), there is a potential for project delays. Response: Mitigate. There are several stakeholder expectations and requirements to manage. Open communication between all stakeholders will be critical. Risk: Because this project is more of an upgrade than a transfer, a shorter training period is planned and there are also no plans to conduct a pilot. As a result, there is a chance that we may not be ready for implementation if users aren't comfortable with less exposure to the system prior to rolling it out. Impact: If we need to do additional training and/or add a pilot to the project, this would increase time and cost. Response: Mitigate. Earlier and frequent communication with end users might mitigate these concerns. For example, a video of the system early might make them more confortable.

Project Startup Report
Presented to the IT Committee April 2015

Project Name: Transformed Medicaid Statistical Information System (T-MSIS)

Agency: Department of Human Services

Business Unit/Program Area: Medical Services - Medicaid/CHIP

Project Sponsor: Julie Schwab, Doug McCrory

Project Manager: Kris Vollmer

Project Description

Transformed Medical Statistical Information System (T-MSIS) is an expansion of the existing Centers for Medicaid & Medicare (CMS) MSIS extract process. T-MSIS is mandated by CMS and the Affordable Care Act (ACA). It is an extension of current decision support and data warehouse systems. Under the existing MSIS extracts the State submits five extracts to CMS on a quarterly basis; under the new T-MSIS extracts the State will submit eight extracts on a monthly basis.

North Dakota Department of Human Services (DHS) is currently replacing their existing Medicaid Management Information System (MMIS) with a new system called Health Enterprise Medicaid Management Information System (HEMMIS). This system is being built by the Xerox Corporation. Concurrent with the replacement of the MMIS, DHS is also implementing a Data Warehouse (DW) that is currently being built by Truven Health Analytics. The State has requested funds from CMS to pursue a contract with Truven to develop Transformed Medical Statistical Information System (T-MSIS) extracts from the Data Warehouse which the HEMMIS will feed along with other DHS systems. The state would use CMS funding to analyze and develop the T-MSIS data requirements implemented by CMS, Section 6504 of the Affordable Care Act.

Business Needs and Problems

As part of CMS plans to improve and expand upon their Medicaid data repository, States are required to augment their current MSIS data extracts, this is called T-MSIS. In North Dakota's case, the entire design will need to be built using data from the Health Enterprise Medicaid Management Information System (HEMMIS).

1. Comply with federally required reporting standards.
2. Meet statutory requirement section 6504 of the Affordable Care Act

Key Metrics		
Project Start Date	Project End Date	Original Baseline Budget
11/01/2014	06/03/2015	$967,216

Project Startup Report

Presented to the IT Committee April 2015

Objectives		
Federal T-MSIS Requirement	Project Objectives	Measurement Description
BBA Section 4753(a)	Requires states to submit electronic claims data transmission consistent with the MSIS as of 1/1/1999.	Deliver T-MSIS extracts electronically.
ACA Section 6402(c)	Provides for withholding federal matching payments for medical assistance to States that fail to report enrollee encounter data in the Medicaid Statistical Information System (MSIS) in a timely manner	Deliver T-MSIS extracts in a timely manner, report all managed care encounter data provided and pass to the decision support system.
ACA Section 6504(a)	Data submitted to CMS after 1/1/2010 must include elements CMS determines necessary for program integrity, program oversight, and administration to receive Federal Financial Participation (FFP).	Meet the current T-MSIS requirement and future requirements as needed.
ACA Section 6504(b)	Mandates a service entity provide sufficient patient encounter data to the State to identify the physician who delivers services to patients, and that the provision of such data to the State is at a frequency and level of detail to be specified by CMS.	Ensure T-MSIS extracts provide sufficient patient encounter data as defined in the requirements.
ACA Section 402(c)	Provides for improvement to the timeliness of reporting and analyzing data related to the enrollment and eligibility of children under Medicaid and the Children's Health Insurance Program (CHIP).	Deliver T-MSIS extracts electronically, consistent with Federal requirements.
ACA Section 4302	Identifying, collecting, and evaluating health disparities data under Medicaid and CHIP on the bases of race, ethnicity, sex, primary language, and disability status.	Ensure T-MSIS extracts contain all available data.
ACA Section 2602	Mandates that States support the office specifically established under ACA for providing federal coverage and payment coordination of dual-eligible beneficiaries.	Ensure that dual-eligibles are included in the T-MSIS extracts as defined.

Project Startup Report
Presented to the IT Committee April 2015

Cost/Benefit Analysis

The following was used as budgeting guideline during the planning phase of the project:

- The budget estimate approved by DHS was in the amount of $967,216
  - $531,000 contract for Truven implementation services
  - $293,000 contract for Truven 12 monthly submissions
  - $47,685 for ITD Software Development support
  - $95,531 for State Project Manager
- The implementation budget approved by CMS was in the amount of $1,158,380
  - This was reflective of a 90% or 75% Federal share as appropriate for Medicaid and a 71% Federal share for CHIP; equaling a total Federal share of $932,786. The details can be found in the APD approval letter.
- An IAPDU will be prepared to reflect the any changes in estimated costs not included in the IAPD.

Key Constraints or Risks

Risk 1: DHS and ITD resource shortages

Impact: Lack of resources and support could delay or derail the project.

Response: During planning, analyze staffing needs and make any necessary changes when possible and develop a closely aligned schedule and communication strategy with the MSP project and other DHS priorities.

Risk 2: Conflicts with Medicaid System Project (MSP) schedule or scope

Impact: Conflicts or complexities could delay or derail the project. T-MSIS implementation relies on the implementation of HEMMIS.

Response: Analyze MSP schedule or scope changes for impacts and make any necessary changes when possible and develop a closely aligned schedule and communication strategy with the MSP project.

Risk 3: CMS changes to T-MSIS data requirements

Impact: T-MSIS implementation relies on the CMS data requirements known at the time of contract execution. CMS changes to data requirements may result in additional project scope or changes to the defined project.

Response: Analyze CMS data requirement for potential scope changes that will impact schedule and budget. Ensure that Contractor and State fully understand all impacts, initiate change requests as necessary along with communicating change impacts back to CMS via Implementation Advance Planning Document updates (IAPDU) and quarterly reports.

Risk 4: New eligibility system for MAGI

Impact: The current system of record for eligibility determination of ACA clients is not populated into the data warehouse; it is unknown which fields will be needed for T-MSIS at this time.

Response: Review contractor mapping document and CMS requirements to determine gaps.

Project Startup Report

Project Name: Motor Vehicle System Replacement

Agency: North Dakota Department of Transportation (NDDOT)

Business Unit/Program Area: Motor Vehicle (MV)

Project Sponsor: Russ Buchholz

Project Manager: Brandi Fagerland

Project Description
NDDOT's Motor Vehicle Division maintains a database of over six million owner and vehicle records with over one and a half million transactions per year. The accounting processes collect and distribute over $260,000,000 dollars per annum. Other responsibilities include the issuance of physically impaired placards, temporary registrations for out of state workers, dealer licensing and registration, and interfaces with motor carrier services. In 1999, NDDOT implemented the VRTS (Vehicle Registration and Titling System) for the Motor Vehicle Division. The VRTS also contains a number of customer web interfaces. At the time the VRTS was implemented, the original intent was to have the vendor that developed the system, Revenue Systems, Inc. (RSI) provide support. However, RSI filed for bankruptcy around the time of the implementation and support has been provided mainly by the North Dakota Information Technology Department (ITD) with assistance from NDDOT. Other state agencies access the VRTS information for operational business with prior approval by NDDOT. The Department of Human Services updates VRTS with alerts regarding non-payment of child support. NDDOT intends to replace VRTS with FAST Enterprises' (FAST) FastVS product. It will allow for vehicle registration, titling, dealer regulation, and advanced financial accountability. The product will be enhanced to meet NDDOT requirements that cannot be met by business process changes.

Business Needs and Problems
1. NDDOT wants to be able to streamline the financial accountability of the motor vehicle division a. The current business process does not allow a monthly system balancing with the Bank of North Dakota, resulting in write-ups from the State Auditor's Office b. The current business process does not allow a daily, real-time system balancing between the central office and the branch offices, resulting in delays in balancing with the Bank of North Dakota c. NDDOT's current business process to provide checks and balances in the tables is manual, which could lead to an incorrect distribution of funds d. Financial reports cannot be recreated with the same data after they are originally produced 2. NDDOT wants to have Motor Vehicle systems built on modern technology a. The VRTS system is built on a PowerBuilder platform, which is considered out-of-date technology, and has a complicated database structure, resulting in few options for support b. It is difficult to re-create user errors in the VRTS system, which leads to additional time spent by NDDOT and ITD troubleshooting problems c. Information within the VRTS is not easily accessible and requires individual coding by an experienced SQL programmer to provide requested data 3. NDDOT wants to improve the processing time of the Motor Vehicle services and deliverables a. The VRTS system requires extensive user training in order to use it successfully, causing additional time and confusion for users b. The VRTS system does not accommodate interruptions during work, leading to additional time spent in re-entry c. Current inventory review is a manual process, which leads to system errors with online renewals

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and running out of inventory in the branch offices d. Current workflow does not efficiently handle the increased volume of work, leading to delays in processing and rework

Key Metrics		
Project Start Date	Project End Date	Original Baseline Budget
03/30/2015	06/30/2016	$8,514,160.48

Objectives	
Project Objectives	Measurement Description
Business Need/Problem 1: NDDOT wants to be able to streamline and improve financial accountability of the Motor Vehicle Division Objective 1.1: Within the new system, provide monthly system balancing with the BND money market account	Measurement 1.1.1: When the State Auditor's Office review is held within 6 months of implementation, the existing audit finding is resolved.
Business Need/Problem 1: NDDOT wants to be able to streamline and improve financial accountability of the Motor Vehicle Division Objective 1.2: Within the new system, provide capability to balance daily collections with daily deposits at all issuance sites	Measurement 1.2.1: Within 3 months of system implementation, a daily balance report will be produced from the system. The daily collections will be compared with the deposits in order to confirm system tracking accuracy at both the central office and branch locations.
Business Need/Problem 1: NDDOT wants to be able to streamline and improve financial accountability of the Motor Vehicle Division Objective 1.3: There will be an accounting reconciliation package available within the new system	Measurement 1.3.1: Within 4 months of system implementation, accounting staff at the central office will be surveyed to determine whether they have the capability to reconcile the refund account, the money market account, and the online and in-house credit card (cybercash) payments via the new system
Business Need/Problem 1: NDDOT wants to be able to streamline and improve financial accountability of the Motor Vehicle Division Objective 1.4: The new system will allow branch collections to come across as electronic funds transfers	Measurement 1.4.1: Within 1 week of system implementation, participating branch fees will be coming in electronically
Business Need/Problem 2: NDDOT wants to have Motor Vehicle systems built on modern technology Objective 2.1: Procure a motor vehicle system built on a current, sustainable technology platform	Measurement 2.1.1: During the procurement phase of the project, ITD architects will be invited to review the technical solution. They will be asked to consider features such as: database structure, support options, compliance with State standards, system architecture, scalability, etc. When surveyed, the architects will identify the proposed solution as a sustainable technology platform.
Business Need/Problem 2: NDDOT wants to have Motor Vehicle systems built on modern technology Objective 2.2: The system will be user intuitive, which will decrease errors, and have audit tracking to assist in determining any functional issues. NDDOT will spend 80% less time troubleshooting system issues.	Measurement 2.2.1: Within 6 months of system implementation, WMS reports will be evaluated to determine time spent on resolving issues and errors prior to system implementation and post implementation.

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Business Need/Problem 2: NDDOT wants to have Motor Vehicle systems built on modern technology Objective 2.3: The system will include advanced ad hoc reporting capability with minimal skillset required to generate reports	Measurement 2.3.1: Within 2 months of system implementation, users will be able to generate needed reports to retrieve information without IT support
Business Need/Problem 2: NDDOT wants to have Motor Vehicle systems built on modern technology Objective 2.4: User manuals and troubleshooting hints will be built into the system processing workflow	Measurement 2.4.1: After User acceptance testing, testers will be surveyed to determine how well the system help answered their questions as they were processing test scripts
Business Need/Problem 2: NDDOT wants to have Motor Vehicle systems built on modern technology Objective 2.5: The new system will be easy to maintain and support	Measurement 2.5.1: Within 4 months of system implementation, IT support staff will be surveyed to determine their comfortable with implementing enhancements and or changes
Business Need/Problem 3: NDDOT wants to improve the processing time of the motor vehicle services and deliverables Objective 3.1: Reduce training time for new system users by 40 hours. Currently, a new system user goes through 80 hours of system training.	Measurement 3.1.1: Within 6 months of system implementation, the system trainers will be surveyed to determine how many hours of system training is required for new system users.
Business Need/Problem 3: NDDOT wants to improve the processing time of the motor vehicle services and deliverables Objective 3.2: The new MV system will require streamlining work processes and allow for stopping and starting work at any point in the process	Measurement 3.2.1: After User acceptance testing, testers will be surveyed to determine whether their work process has been improved and their processing time has been reduced
Business Need/Problem 3: NDDOT wants to improve the processing time of the motor vehicle services and deliverables Objective 3.3: Reduce turnaround time for mail and dealer work from 3 weeks to 5-6 business days	Measurement 3.3.1: Within 6 months of system implementation, NDDOT consumer staff will review outstanding paperwork to determine if mail and dealer work turnaround time has been reduced to 5-6 days
Business Need/Problem 3: NDDOT wants to improve the processing time of the motor vehicle services and deliverables Objective 3.4: The new system will have an inventory tracking system that will notify of inventory shortages, usage, and supply.	Measurement 3.4.1: During user acceptance testing, the inventory tracking system will be tested to confirm requirements are met and the system is improved

Project Startup Report

Cost/Benefit Analysis
In 2012, NDDOT requested a cost estimate from the Information Technology Department (ITD) to rewrite the existing VRTS application, which was accepted; however, ITD stated they did not have the resources available for another large project in the 2013-2015 biennium. ITD contacted NDDOT later regarding options for a new motor vehicle system, based on information the Chief Information Officer (CIO) received from other states. During the 2013 Legislative Session NDDOT received the funding for a new motor vehicle system project.

Key Constraints or Risks
Risk: NDDOT staff will need to be dedicated to the project and will be away from their current functional duties
Impact: Staff will be pulled away from their functional duties for the time they will be needed on the project work, causing delays in their functional work
Response: NDDOT will backfill key positions to allow staff to work on the project
Risk: Major changes to the business process may be required to meet the business needs
Impact: Staff may be reassigned to new duties. They also will experience a change in their work duties. Customers and dealers will see a change in how they interact with the NDDOT.
Response: An organizational change plan will be developed to guide staff through the new duties and changes to current duties. A communications plan will be developed to determine the best way to communicate with customers and dealers.
Risk: Appropriation for the project is not received for the 2015-2017 biennium
Impact: Project ends
Response: Project ends
Risk: If a new database is going to be required to support the new product, data conversion becomes a major concern because of the relationship complexity. If data conversion is not handled properly, the cost to cleanse that data later would be very high.
Impact: The new system will have inaccurate relationships between data fields and data could be lost in the conversion
Response: NDDOT will work with the vendor to ensure that they fully understand the relationships in the current database and properly import data into the new system
Risk: Because of the poor quality of the data pulled into the current system, without proper data cleansing, bad data will be pulled into the new system
Impact: The new system will still have data quality issues that exist today
Response: Data clean-up will be a priority task for this project
Risk: Motor vehicle staff turnover due to normal rates of turnover, staff nearing retirement age, and also resistance to change during the project
Impact: Backlog of current work as well as lack of resources for the project
Response: An organizational change plan will be developed to address concerns
Risk: The chosen vendor doesn’t perform within schedule and budget expectations
Impact: Project delayed and costs go up
Response: A contingency plan will be developed during planning. State procurement policies and practices will be followed to ensure a manageable contract is signed and thus the vendor is held more responsible.

Project Closeout Report

Project Name: K-12 Domain of the North Dakota Statewide Longitudinal Data System (SLDS)

Agency: Department of Public Instruction

Business Unit/Program Area: SLDS

Project Sponsor: David Massey

Project Managers: Sarah Lee, Jennifer Kunz

Project Objectives	Measurements	
	Met/ Not Met	Description
1. Timely data collection	Met	1.1 For PowerSchool pulls only, student-level enrollment data and attendance data is collected within one week of a student's entry/exit in PowerSchool at the conclusion of the project 1.2 NDSA results loaded into data warehouse three weeks from delivery of data at the conclusion of the project 1.3 ACT results loaded into data warehouse three weeks from delivery of data at the conclusion of the project 1.4 Assessing, Comprehension, and Communication in English State to State (ACCESS) for English Language Learners (ELL's) results loaded annually at the conclusion of the project 1.5 Northwest Evaluation Association (NWEA) results loaded within three weeks of district testing window closure at the conclusion of the project **RESULT:** All measurements were met
2. Provide foundational content in data warehouse to meet grant requirements and allow for effective usage of data at a state and district level	Met	2.1 Data warehouse contains three years of enrollment history at the conclusion of the project 2.2 Project has met the required elements for ND's obligation of the Data Quality Campaign (DQC), element numbers 1 though 8 2.2.1 Statewide student identifier 2.2.2 Student-level enrollment data 2.2.3 Student-level test data 2.2.4 Information on untested students 2.2.5 Statewide teacher identifier with a teacher-student match 2.2.6 Student-level course completion data 2.2.7 Student-level Scholastic Aptitude Test (SAT), ACT, and Advanced Placement Exam data 2.2.8 Student-level graduation and drop-out data 2.3 Data warehouse has ability to match student-level P-12 and higher education data (DQC #9) 2.4 Data warehouse contains information from all ND public schools 2.5 Data warehouse contains information from interim student assessments **RESULT:** All measurements were met

Project Closeout Report

3. Provide appropriate delivery mechanisms with secure role-based access to data	Met	3.1 Reports are available that have n-sized suppression implemented where required 3.2 Teacher-level access to data regarding their students exists 3.3 Reports are available that show users' authorization **RESULT:** All measurements were met
4. Data quality established to ensure data warehouse use will result in accurate reports	Met	4.1 Audit features are in place that allow users to verify anomalies in their data (DQC #10) 4.2 Validation reports delivered to the district-level information technology personnel providing them feedback on data quality in their source systems 4.3 PowerSchool state report extracts match what data warehouse extracts provide to STARS (To perform this measurement: State provides districts with a report on what the State extracts from the data warehouse into STARS to compare to the PowerSchool extract. State will also run a sampling of districts' extracts. Is the Average Daily Attendance/Average Daily Membership [ADA/ADM] calculation correct?) **RESULT:** All measurements were met
5. Data warehouse features meet the requirements of the IES grant	Met	5.1 School districts' fall and spring enrollment reports are generated from available elements in the data warehouse that have been extracted, and they are able to minimize their state reporting requirements to data that is not in their student information systems (e.g., PowerSchool) 5.2 State can automatically assign state student identifier at the conclusion of the project 5.3 There is a repeatable process to assign and complete linkages to higher education at the conclusion of the project **RESULT:** All measurements were met

Schedule Objectives					
Met/ Not Met	Original Baseline Schedule (in Months)	Final Baseline Schedule (in Months)	Actual Schedule (in Months)	Variance to Original Baseline	Variance to Final Baseline
Met	31 12/01/2010-06/28/2013	45 12/01/2010-08/22/2014	43 12/01/2010-06/30/2014	N/A	0%

Budget Objectives					
Met/ Not Met	Original Baseline Budget	Final Baseline Budget	Actual Costs	Variance to Original Baseline	Variance to Final Baseline
Met	$4,915,680	$4,625,552	$4,721,496	N/A	2.0% over

Major Scope Changes
The major scope changes for this project were caused by the addition and deletion of subject areas and reports based on the needs of DPI, the school districts, and other stakeholders. As the project progressed and the stakeholders started to see the reports and the data, new subject areas were deemed to be of higher value and previously-planned subject areas and/or reports were eliminated or reprioritized as optional – only to be done if there was time and money left in the project.

Project Closeout Report

Success Stories	
1.	The ability to provide advanced analytics on the data between high school and postsecondary enrollment in remediation was a full-cycle of data collection, data use, research and provide value add back to the contributors with remediation predictions, allowing districts the feedback they need for program evaluation. The cooperation with the university system and k12 was critical for the success of transitional data. The eTranscript application will provide cost savings and time savings for all districts in the state, including students and parents.
2.	A classroom teacher and a building principal have a "one stop shopping" so to speak place to find student information. I have seen this in practice. I have also seen grade level teachers look at the data collectively as a group to make decisions based on their student needs.
3.	Teachers and administrators seeing patterns in student data that confirm what they may have been thinking but weren't certain on.
4.	Better formative instruction developed from data.
5.	It has provided an efficient means for reporting which has given teachers time to focus on classroom instruction.
6.	We are able to get to and use the data so much easier...we are able to show parents where their kids are performing across the board.
7.	Teachers using the NWEA Teacher Report to change what they are doing in their classroom instruction. For instance, using the lexile sort ability to work with leveling of nonfiction articles on Newsela.

Lessons Learned	
1.	The iterative approach to building the K12 warehouse was very successful. It allowed for deployments of information to be handled in increments, where you left and came back to an area after more information was collected, or the vendor had made enhancements at another location and was able to bring that work done in for free. The stable contractors and type of contract in place with the K12 vendor was key to its success. By reducing the priority of schedule allowed the budget to be maximized for quality and scope; however, there were subcomponents of the project, such as security, where other vendors were involved and the quality of resources provided resulted in delays and turnover of contractual resources.
2.	I believe this project went well because the people involved looked, researched, and discussed other state's SLD projects. Second, the project is ongoing and has active involvement from the field, people who use the system. Third, the SLDS project is being implemented over time so it is growing based on user needs. Creating the SLDS for use was and remains a #1 goal.
3.	The project was so large that often times you didn't know if it was ever going to be complete. The early training wasn't as good as the current training but that was expected due to circumstances.
4.	Clearer communication with parents about the data collection (is a lesson learned)
5.	There were times when only a few people made decisions and things didn't get done because it wasn't a priority. There are certain tests going in the system now that should have been in a year ago.
6.	Plan data warehouses using an iterative schedule as data can be staged and loaded into the data warehouse by subject area, then released for use in creating reports (entered into lessons learned Wiki already)
7.	Data warehouse work is best done using one of the agile means of working on projects; however, since state reporting and work structures are not currently set up for an agile environment, use progressive elaboration of the schedule when portions of the work are unknown until other work is complete, and schedule rolling wave planning or re-plans into the schedule as work efforts will most likely change based on user feedback on completed work
8.	Though not common for time and materials contracts, a 10% retainage can be used on monthly or progress payments for deliverables to provide incentive for the vendor to stay on schedule (entered into lessons learned Wiki already)
9.	When doing a time and materials contract with deliverables, consider putting the NTE limit at the high level instead of on each deliverable

Project Closeout Report

10.	Find out if the environment setup is new to the technical team – if so get all the areas together (Computer Systems, NOC, Network, etc.) before work to strategize who needs to do what, and in what order, and if any service requests or authorizations are required; consider creating a separate list within SharePoint for technical issues and collaboration
11.	When the schedule calls for re-plans or additional planning dependent on the status of the previous work, allow time at the end of any vendor contracts or work orders to accommodate the planning activities
12.	When working with grants, typically not all of the grant money will be allotted to the project budget, the agency will most likely keep some for indirect costs (salaries, equipment, etc.); therefore verify with the agency that the project budget from the grant will remain solely the project's budget, separate from the indirect costs budget

Other Comments	
1.	Best practices from similar projects were not available with ITD and this project did a great job in watching, listening and discussing best practices with other states. Decisions were made on failures and success of other states. ND was able to bring forward a solution to building a complex K12 warehouse and SLDS system that reduced risks and someone guaranteed a level of success. The scope changes of the project were managed well, ND delivered a system that far exceeded the original scope by adjusting to what could be done as new information and technologies and best practices were identified. There was removal of some scope due to the value vs availability of data and business users, which was a smart choice as these can be added in the future when ready and allowed the project to focus on more critical elements of the K12 SLDS.
2.	This was a large project that affected multiple agencies and changes in agency processes. The scope seemed to adapt to changes in current events (i.e. Succeed 2020); the project managers did an excellent job 'herding the cats.'
3.	The deliverables in this project changed based on need and were constantly being reviewed and revised to make sure the project was delivering value. Therefore, while they fit into the objectives of the project, they were not necessarily exact to the original scope.
4.	Testing a data warehouse requires not only technical resources, but really relies on the business using the data. As more and more adoption of the K12 warehouse increased, the finer quality issues are addressed that could not have been predicted in a technical test plan.
5.	The SLDS K-12 project has always been focused on the user, the needs of the user, and easy to use for the user. I have always felt the project has kept that focus and is a useful tool for educators which is being used out in the field
6.	The environment meets the needs for providing student dashboards and researched based data marts. As usage increases, demand for more advanced features such as: dynamic interaction (creating cohorts), aggregate comparisons against other districts and state as a whole, statewide reporting on advanced issues such as mobility and more predictive analytics is expected.

PROJECT CLOSEOUT REPORT

Submitted to Large Project Oversight on 8/31/2015

GENERAL INFORMATION

Program/Project Name: K-12 Identity Management Services Project
Agency Name: ITD – EduTech
Project Sponsor: Jody French (EduTech)
Project Manager: John Wohl (ITD)

PROJECT BASELINES

Original/ Final	Baseline Start Date	Baseline End Date	Baseline Budget	Actual Finish Date	Schedule Variance	Actual Cost	Cost Variance
Originally Baselined Information	5/14/2015	11/01/2015	$451,283*	11/26/2015	0%	$395,802	-8.2%
Final Baseline Information	5/14/2015	11/26/2015	$451,283	11/26/2015	0%	$395,802	-8.2%

Notes:

**The next qualified RFP respondent listed $600,000 for implementation costs plus software costs.*

MAJOR SCOPE CHANGES

Change #	Description	Action: Accept/Reject	Action Date
1	Added Custom Application (remove duplicate data & upload non-powerschool users) – Impacted Product scope	Accept	6/30/2014
2	Custom Application complexity – Planning completed/Updated project schedule – Impacted Baseline project schedule	Accept	9/9/2014
3	Additional CampusEAI Operational Support (on-site/off-site) – Impacted Post Production Support schedule	Accept	11/14/2014

PROJECT OBJECTIVES

Business Objective	Measurement Description	Met/ Not Met	Measurement Outcome
Objective 1.1: Implement Active Directory as a single, unique, authoritive authentication system for services delivered by the State of North Dakota for K12 Schools.	Measurement 1.1.1: Office 365, EduTech WordPress-based services, SLDS, and PowerSchool will all authenticate against ND K12 AD. Success will be based upon all of these systems being capable of K12 AD authentication by August 25	Met	*Noted in measurement*
Objective 2.1: The Microsoft Forefront Identity Management	Measurement 2.1.1: FIM will provision or de-provision accounts for students or staff	Met	*Noted in measurement*

(FIM) system will be implemented to manage ND K12 identity records, and automatically provision and de-provision K12 Active Directory accounts based upon data collected from appropriate sources for all administrators, teachers and students in North Dakota K12 public schools. This will be accomplished by using K12 user information that currently resides in the ND Statewide Longitudinal Data System.	within 24 hours of their entry/exit into/out of the SLDS with an accurate statewide student ID or teacher license number. Success will be based upon the system automatically processing account changes (account creation, account disable, account OU move) at an accuracy level of 95% (provision changes/provision change requests) within one full business day.		
Objective 2.1:	Measurement 2.1.2: The efficiency of managing K12 identities will be determined by the ratio of administrator time to total active identities being managed. Success will be determined by having no more than one (1) total FIM system admin FTE per 50,000 active identities	Met	*Noted in measurement*
Objective 2.2: The Microsoft Forefront Identity Management Portal (FIM Portal) will be implemented to provide schools with the ability to add staff members that are not in the SLDS into the identity management system in such a way that the accounts linked to the non-SLDS staff will not become orphaned. This same system will be the management portal allowing individuals to manage their own account, and/or the accounts of others within their administrative authority.	Measurement 2.2.1: This will be measured by the successful implementation of FIM portal, allowing schools to add/approve local staff with linked accounts that are automatically de-provisioned unless renewed one year after creation and manage the roles and group memberships of users within their administrative authority. *(Included Custom App)*	Met	*Noted in measurement*
Objective 2.3	Measurement 2.3.1:	Met	*Noted in measurement*

Self-service password reset will be implemented and made available to all K12 users in the system.	This will be measured by the successful implementation of the self-service password reset functionality for users in the system.		
Objective 2.3	Measurement 2.3.2: The effectiveness of the self-service password reset will be measured by the help desk requests that are documented for password reset assistance. Success will be determined with 25% of password resets occurring via self-service means. (*There isn't an exact measurement to determine the percentage of ongoing help-desk calls versus online self-service resets. Based on current volume of support calls the measurement appears to be met.)*	Met	*Noted in measurement*

POST-IMPLEMENTATION REPORT

Post-Implementation Reports are performed after a project is completed. A "PIR" is a process that utilizes surveys and meetings to determine what happened in the project and identifies actions for improvement going forward. Typical PIR findings include, "What did we do well?" "What did we learn?" "What should we do differently next time?" Notable findings are presented in this closeout report.

Lesson learned, success story, ideas for future projects, etc.
Success stories ➢ **The State was able to very effectively and quickly create 120,000+ identities and Active Directory accounts, which are synchronized with Office 365, providing a powerful collaboration tool for North Dakota K12 schools, covering all corners of the state.** This delivers services never before available to schools such as: real-time document collaboration, personal file storage, instant messaging, calendaring, and nearly limitless email storage, with a modern interface, at no additional cost to them. Simultaneously, the ability to onboard users is practically invisible in most cases, requiring intervention only as the exception rather than the rule. Adoption of these tools by schools is at a rapid pace, exceeding historical adoption rates for similar tools provided by the state. Also of importance, the identity and directory services provide a platform upon which we can grow and continue to offer additional services in the future. ➢ The Business group was very knowledgeable outlining functionality needed and the end user groups requirements. EduTech was able to recognize the need to configure and deploy as an Enterprise wide system.
Lessons learned ➢ Vendor wasn't able to supply project resources (personnel on time). Off-Shore personnel did not arrive at ND and were then replaced with other Vendor personnel. Majority of personnel outlined in the vendor's RFP proposal were not assigned to ND's project. ➢ Size and Complexity exceeded the skill set of the vendor ➢ The project budget minimized the effectiveness of the RFP process in selecting the most qualified vendor.

Project Closeout Report

Project Name: Taxpayer Access Point Business Registration and Webfile

Agency: Tax Department

Business Unit/Program Area: Tax Department

Project Sponsor: Lucas Asche

Project Managers: Brandi Fagerland, Callie Wachendorf

Objectives		
	Measurements	
Project Objectives	Met/Not Met	Description
Increase usage of electronic services by utilizing new technology, in turn, reducing costly paper processes.	Met	**Description:** Increase Webfile utilization by five percent for sales and withholding taxes within the first six months after project completion. For taxes new to Webfile, have an adoption rate of 50% in the first six months after project completion. **Result:** Sales Tax - North Dakota law identifies any sales tax account that is required to file on a monthly basis and electronically. Prior to TAP, there were 14,445 accounts registered to electronically file. On February 12, 2015 the accounts number had risen to 15,799 for those registered to electronically file. The increase of 1,354 accounts or 9.4% has been measured. Income Tax Withholding– prior to TAP there were 16,746 accounts registered to electronically file. On February 12, 2015 a measurement of 17,734 accounts was taken for those who want to electronically file. The increase is measured at 790 accounts or 5.9%. Lodging– On February 12, 2015 there were 1,189 City Restaurant and Lodging accounts, 709 of those accounts were registered to electronically file. This adoption rate translates to 59.6%.

Project Closeout Report

Increase usage of electronic services by utilizing new technology, in turn, reducing costly paper processes.	Met	**Description:** Have eighty percent of new taxpayers register online through TAP within six months of project completion. **Result:** The Registration Section manually tracked the number of paper applications received and processed for new Sales and Use Tax permits and Income Tax Withholding accounts. During the timeframe of January 1, 2015 to January 31, 2015 the Registration Section received 119 paper applications. During that same timeframe, 517 applications were electronically submitted through TAP. This results in 81% of the applications received during the timeframe being submitted electronically through TAP.
Increase usage of electronic services by utilizing new technology, in turn, reducing costly paper processes.	Not Met	**Description:** Have eighty percent of new taxpayers who submit electronic applications also file/pay electronically within six months of project completion. **Result:** The planned process has changed on this measurement which is the reason it was not met. The application process provides the taxpayer with an access code to get signed up for TAP; Because we have third parties involved, some filers only file annually, and not every taxpayer has filed a return since TAP went live, we are unable to, without assumptions, get exact numbers and feel this objective could have been more clearly defined. For those that do sign up and still file on paper, letters are sent reminding them that they should be filing electronically.
Increase usage of electronic services by utilizing new technology, in turn, reducing costly paper processes.	Met	**Description:** Reduce the time it takes to process applications to less than two business days within the first three months of project completion. **Result:** As of December 30, 2014 there were 323 electronic applications that were received and worked to completion in December. The average number of days that it took to completely work these applications was 1.916 days. It should also be noted that this average also included weekends, holidays, and waiting time when requesting additional information from the taxpayer.
Increase usage of electronic services by utilizing new technology, in turn, reducing costly paper processes.	Not Met	**Description:** Reduce mailing costs for the associated tax types by ten percent within six months of project completion. **Result:** This measurement was not met. Originally our intentions were to eliminate all correspondence and replace it with emails. Due to some legal challenges, this was put on hold and will be looked at in the future. Some emails are being sent in place of letters, but with the volume of taxpayers increasing so quickly, the total cost of mailings, we assume, has increased. The main decrease in mailing costs were for mailing returns, and we expect to further reduce mailing costs in the future once we start to utilize email over paper letters.
Eliminate the need to contract for expensive and time-sensitive application programming changes to accommodate legislative and business process changes	Met	**Description:** Eliminate ITD application programming costs for the taxes referenced in the scope of services within three months after project completion. **Result:** Once TAP was live, ITD was no longer billing the Tax Department for ITD's services.
Eliminate the need to contract for expensive and time-sensitive application programming changes to accommodate legislative and business process changes	Met	**Description:** Department staff will have the knowledge to configure other applications/processes in TAP within six months after project completion. **Result:** The department staff is able to operate applications and processes effectively.

Project Closeout Report

Schedule Objectives					
Met/ Not Met	Original Baseline Schedule (in Months)	Final Baseline Schedule (in Months)	Actual Schedule (in Months)	Variance to Original Baseline	Variance to Final Baseline
Met	12	12	12	0	0

Budget Objectives					
Met/ Not Met	Original Baseline Budget	Final Baseline Budget	Actual Costs	Variance to Original Baseline	Variance to Final Baseline
Met	$1,000,000	$1,000,000	$966,688.98	4.6% under	4.6% under

Major Scope Changes
None

Lessons Learned
- Not receiving the necessary exemptions, e.g. state login system, caused unnecessary work and has potentially compromised the security of our system until a resolution is determined. Also, an application was submitted for large project reporting, which I was disappointed with the response that is was over $500,000 (the exact reason for the waiver request). I feel both could have been granted, and now that the project is over, we still see the value in this. - The procurement process was painful, considering our circumstances. We would have liked to have some more flexibility in drafting our contract based on what we know (we have legal counsel on staff) and previous experience/interaction/projects with the contractor, versus having to argue with AG office about damages when we knew there would be none. There was no consideration given to us that we already have a contract in place with Fast (for much more money than this whole project), and that Fast actually has their people relocate for the duration of the project (as well as onsite support of Gentax). They also have contracts in half the states, so we knew they were not going to pick up and leave in the middle of the project. - This project was completed on time and under budget, and because of the staff and contractors assigned to work on this project, it went very well as we had no major issues to deal with. The major issues we dealt with were all due to large project oversight.

Success Stories
- Because the filing deadline for those taxes implemented in TAP is the end of September, we have yet to see overall results of our work. Many people have registered their business in TAP, which we see as a positive thing. In 6 months, we will be able to measure our objectives, one of which we have already met. - Someone sitting next to a friend on an airplane read about TAP in the newspaper and thought it was really cool the state was providing this. - The pre-registration process that was implemented was very successful both in getting the word out about TAP, but also allowing phone calls and questions to be spread out over a number of weeks as opposed to a few days.