Lessons Learned Documentation

General Information			
Project Name			Date
AFIS Upgrade, Phase II			12/1/2016
Sponsoring Agency			
Nebraska State Patrol			
Contact	Phone	Email	Employer
Tony Loth	402-479-4007	Tony.loth@nebraska.gov	Nebraska State Patrol
Project Manager	Phone	Email	Employer
Tony Loth	402-479-4007	Tony.loth@nebraska.gov	Nebraska State Patrol

Project Start Date	09/09/2015	Estimated End Date	10/28/2016	Project End Date	11/30/2016

Key Questions			Explanation
1. Did the scope of the project change?	☐ Yes	☒ No	
2. Did the project meet the expectations of the stakeholders?	☒ Yes	☐ No	
3. Did the project costs exceed the budget provided?	☒ Yes	☐ No	Cost overrun was approximately 1.2% ($24,500) of the initial budgeted cost. This was due to two change orders totally $23,000 and additional training for IT at a cost of $1500.

Cost Management
Show the actual expenditures compared to planned levels. Break the costs into other categories as appropriate.

Fiscal Year [2016]

Budget Item	Budget at Completion (BAC)	Actual Costs (AC)	Cost Variance (CV = BAC – AC)
Salaries			
Contract Services	$1,997,500	$2,020,500	$23,000
Hardware			
Software			
Training	$0	$1500	$1500
Other Expenditures*			
Total Costs	$1,997,500	$2,022,000	$24,500

Other Expenditures include supplies, materials, etc.

Lessons Learned Documentation

Significant Project Milestones
Insert additional lines as necessary.

Milestone	Met	Not Met	Original Date	Actual Date	Impact (if late)
Signed Contract	X			5/11/2015	
Hardware Procurement	X			11/4/2015	
RDD Approval	X		12/31/2015		
Factory Acceptance Testing	X		5/6/2016	6/17/2016	Delayed go-live by one month
Hardware Delivery	X		7/1/2016	7/1/2016	
Site Acceptance Testing	X		8/19/2016	8/19/2016	
System Training and Documentation	X		9/23/2016	9/23/2016	
Go Live	X		9/8/2016	10/3/2016	
Final System Acceptance	X		11/30/2016	11/30/2016	

What went wrong during the project and recommendations to avoid similar occurrences in the future
Provide a summary of what went wrong during the project, including the problem or issue, the impact and the recommendation to avoid those occurrences in the future.

There were some workflow issues and changes that were not identified during the requirements gathering phase of the project. This led to some change orders and additional cost but fortunately no delays. In addition, there were a number of items that were identified that will not be included in this upgrade but may be resolved with future projects. Given the scope of this project, the number of issues that were missed was small and very few were mission critical.

From an internal agency perspective, the project was budgeted based solely on the contractual agreement with the vendor. No consideration was made with regards to travel expenses for factory acceptance testing or overtime that was needed to get work done on the project while also staying current with normal daily functions. Future projects should include some projections as to the amount of overtime or travel expenses that may be required.

What went right during the project and how similar projects may benefit from this information
Provide a summary of what went right during the project, including the success or accomplishment, the impact and how future projects may benefit from this information.

Lessons Learned Documentation

Our project team spent a tremendous amount of time reviewing the contract and the requirements document to ensure that there were very few surprises as the project progressed. While the vendor I think was at times frustrated with the pace of the project early on, I feel strongly that the attention to detail paid dividends in the long run.

Another key factor that led to success on this project was ensuring that our agency project team had all of the right subject matter experts. Including representatives from both the tenprint and latent teams as well as IT personnel that could help with interfaces with other systems ensured that the new system addressed all of these needs.

NITC Reporting/Process Improvements and Recommendations

Use this section to insert NITC Enterprise Reporting improvements and recommendations.

I like the concept of the idea of the NITC reports and see potential for using Clarity PPM for future projects within my agency and division. That being said, I did find the Clarity PPM project tracking software a little bit cumbersome. While I was able to muddle my way through it for this project, I think some additional training would be beneficial so that we can get the most out of the tool.

Additional Comments

Use this section to insert comments / concerns not included in any other section.

Lessons Learned Documentation

General Information			
Project Name			Date
Data Dashboard Project			8/1/2016
Sponsoring Agency			
Nebraska Department of Education			
Contact	Phone	Email	Employer
Dean Folkers	402-471-4740	Dean.folkers@nebraska.gov	Education
Project Manager	Phone	Email	Employer

Project Start Date	7/1/2013	Estimated End Date	6/30/2016	Project End Date	6/30/2016

Key Questions			Explanation
1. Did the scope of the project change?	☒ Yes	☐ No	Expanded functionality and enterprise use
2. Did the project meet the expectations of the stakeholders?	☒ Yes	☐ No	Yes.
3. Did the project costs exceed the budget provided?	☐ Yes	☒ No	No.

Cost Management
Show the actual expenditures compared to planned levels. Break the costs into other categories as appropriate.

2013-2016

Budget Item	Budget at Completion (BAC)	Actual Costs (AC)	Cost Variance (CV = BAC – AC)
Salaries	$104,396	$104,396	$0
Contract Services	$2,458,546	$2,455,846	$2,800
Hardware			
Software			
Training			
Other Expenditures*			
Total Costs	$2,562,942	$2,560,242	$2,800

Other Expenditures include supplies, materials, etc.

Lessons Learned Documentation

Significant Project Milestones
Insert additional lines as necessary.

Milestone	Met	Not Met	Original Date	Actual Date	Impact (if late)
Production Deployment	☒	☐	11/2015	4/2016	Delayed scaling
Data Warehouse	☒	☐	3/2016	12/2015	
Accountability Data Mart	☒	☐	6/2016	4/2016	

What went wrong during the project and recommendations to avoid similar occurrences in the future
Provide a summary of what went wrong during the project, including the problem or issue, the impact and the recommendation to avoid those occurrences in the future.

Through the life cycle of the entire project, there were several challenges that needed to be addressed. The primary challenge was the reliance on the "good will" of the Student Information System (SIS) vendors to create the web services infrastructure to establish the transactional migration of data into the Operational Data Store (ODS). The delays in development, testing, and production deployment were fundamentally associated with the third party vendors developing a solution – a critical path strategy to support the sustainability of the project and system. Leveraging the required expectations for SIS vendors put forth in other states, Nebraska was able to move forward the integration and alignment to the system.

A key recommendation for the future would be to incent the desired outcomes through either statutory requirements or fiscal support for meeting the expectations.

What went right during the project and how similar projects may benefit from this information
Provide a summary of what went right during the project, including the success or accomplishment, the impact and how future projects may benefit from this information.

The primary goal of providing Nebraska educators facing dashboard tool that displays near real time integrated data to inform the teaching and learning process was met. Because of this work, strategic effort to leverage the broader implementation and create systemic transformation for efficiencies in Nebraska schools occurred. Remaining focused on the future direction beyond the scope of the project allowed for decisions within the project to be made that enabled flexibility and created a foundation for additional innovations.

A specific practice used during this project was "Co-Development." Historically, when working with contractors during the development and implementation of software, the contractor develops the code and provides a how to guide or documentation at the end of the project as part of Knowledge Transfer. During this project, the developer's "co-developed" with the Department of Education staff during the process. While this took additional time, the opportunity to build the capacity, skill set, and experience during the process created a deeper understanding and better prepared the NDE staff to take on the long-term maintenance, support, and additional development work. Ultimately, reducing the need for extended maintenance contracts to provide support and enhancements for the system in the future.

NITC Reporting/Process Improvements and Recommendations
Use this section to insert NITC Enterprise Reporting improvements and recommendations.

Automation efforts through Clarity, once fully implemented, will provide some efficiencies in the process.

Lessons Learned Documentation

Additional Comments Use this section to insert comments / concerns not included in any other section.
The value add to schools has been and will continue to be tremendous.

Lessons Learned Documentation

General Information			
Project Name			Date
Network Nebraska			8/1/2016
Sponsoring Agency			
Office of the Chief Information Officer (in partnership with the University of Nebraska)			
Contact	Phone	Email	Employer
Tom Rolfes	402-471-7969	Tom.rolfes@nebraska.gov	Office of the CIO/NITC
Project Manager	Phone	Email	Employer
Andy Weekly	402-471-3828	Andy.weekly@nebraska.gov	Office of the CIO

Project Start Date	07/01/2006	Estimated End Date	07/01/2012	Project End Date	08/01/2016

Key Questions		Explanation
1. Did the scope of the project change?	☒ Yes ☐ No	Over time, the project has evolved to serve other education-related entities in addition to the formal education entities as described in N.R.S. 79-1201.01.
2. Did the project meet the expectations of the stakeholders?	☒ Yes ☐ No	Listening to anecdotes from the Participants and the Network Nebraska Advisory Group, the project has far exceeded the expectations of the stakeholders.
3. Did the project costs exceed the budget provided?	☒ Yes ☒ No	The project temporarily and deliberately had a negative budget for the first three fiscal years when the hardware and backbone development costs exceeded the expected revenues. Once the number of participants reached 232 by 6/30/2010, the project became financially solvent and has retained a positive budget variance up through 2015. The 2015-16 budget overrun provided for a significant purchase of dark fiber equipment to upgrade the state backbone and it was a planned event, with a five-year amortization of recovery through the Participation Fee.

Lessons Learned Documentation

	NETWORK NEBRASKA-EDUCATION; Cost Management Show the actual expenditures compared to planned levels. Break the costs into other categories as appropriate. Fiscal Year [2015-16]			
Object Codes	Budget Item	2015-2016 Budget At Completion (BAC)	Actual Costs to Date (AC)	Cost Variance (CV = BAC - AC)
543303	IT Consulting-UNCSN	$ 210,000	$ 198,123	$ 11,877
543304	IT Consulting-OCIO	$ 3,738	$ -	$ 3,738
543305	IT Consulting-NDE	$ 18,000	$ 18,000	$ -
555301	Equipment (routers, switches)	$ 210,301	$ 514,525	$ (304,224)
527500	Equipment Maintenance	$ 67,619	$ 91,796	$ (24,177)
555200	Software	$ 32,873	$ 7,374	$ 25,499
555100	Software Maintenance	$ 6,325	$ 11,449	$ (5,124)
547100	Training-UNCSN	$ 1,875	$ 1,713	$ 162
	Training-OCIO/NDE	$ -	$ -	$ -
574602	Travel-UNCSN	$ 7,500	$ 9,345	$ (1,845)
574603	Travel-OCIO	$ 500	$ -	$ 500
574604	Travel-NDE	$ 500	$ -	$ 500
522100	Dues-SEGP	$ 41,000	$ 41,000	$ -
559165	Indirect Costs/Debt-OCIO	$ 79,507	$ 79,507	$ -
524600	Rent Expense, Co-Locations	$ -	$ 388	$ (388)
526100	Facility, I2 Upgrades	$ -	$ 6,254	$ (6,254)
521200	Toll-free 888-637-6327, MCU	$ 612	$ 1,837	$ (1,225)
543400	Other-ANS, Website, Misc	$ 22,544	$ 4,343	$ 18,201
	Total Costs	$ 702,894	$ 985,653	$ (282,759)
				140%

Cost Management Notes: The 140% planned budget overrun for 2015-16 was mainly attributed to the purchase of dark fiber equipment to refresh and upgrade the existing Lincoln to Omaha dark fiber circuit. This equipment expenditure permitted the University of Nebraska to expand the data throughput to 10+Gbps and to accommodate future bandwidth growth. Because this equipment was procured using E-rate eligibility, the Office of the CIO was able to file for Category 1 E-rate support. If fully funded, the E-rate program will reimburse up to $347,150 of a nearly $510,000 expenditure. There is also a positive variance amount within Business Unit 65060020 to help compensate for the temporary shortfall.

Lessons Learned Documentation

Significant Milestones (Met, Not Met, Scheduled)						
Milestone	Met	Not Met	Sche-duled	Original Date	Actual Date	Impact (if late)
Pre-Planning/Organization (0 entities)	☒	☐	☐	7/1/2006	7/1/2006	None
Phase I Implementation (94 entities)	☒	☐	☐	7/1/2007	8/10/2007	None
Phase II Implementation (88 entities)	☒	☐	☐	7/1/2008	8/11/2008	None
Phase III Implementation (49 entities)	☒	☐	☐	7/1/2009	8/3/2009	None
Phase IV Implementation (3 entities)	☒	☐	☐	7/1/2010	8/15/2010	None
Phase V Implementation (20 entities)	☒	☐	☐	7/1/2011	8/12/2011	None
Phase VI Implementation (8 entities)	☒	☐	☐	7/1/2012	8/3/2012	None
Phase VII Implementation (7 entities)	☒	☐	☐	7/1/2013	8/9/2013	None
Phase VIII Implementation (14 entities)	☒	☐	☐	7/1/2014	8/1/2014	None
Phase VIII Implementation (15 entities)	☒	☐	☐	7/1/2015	8/1/2015	None
Phase IX Implementation (6 entities)	☐	☐	☒	7/1/2016	8/5/2016	None

What went wrong during the project and recommendations to avoid similar occurrences in the future

Provide a summary of what went wrong during the project, including the problem or issue, the impact and the recommendation to avoid those occurrences in the future.

In the 10-year history of Network Nebraska, and the Distance Education Enhancement Task Force (DEETF) a year prior to that, not one single thing “went wrong” over the entire 132 months of operations. It could be argued that there were controversial issues that were handled, and some temporary funding shortfalls from time to time due to Network Nebraska being a self-funded project, but no major outages, no drops in participation, and no major crises occurred over this time period.

Here is an annotated list of the more controversial issues, their impacts, and how those issues could have been avoided:

Lessons Learned Documentation

1. **Network Start-up Funding.** Senator Raikes, in his 2006 groundbreaking legislative bill, LB 1208, issued a decree that "The Chief Information Officer shall establish a cost structure based on actual costs, including necessary administrative expenses but not including administrative travel or conference expenses, **and shall charge participants according to such cost structure**." In that cost recovery model, the Network Nebraska project began with $0 start-up funding, and had to "borrow" operational funds from the Office of the CIO and shared hardware with the University of Nebraska Computing Services Network to erect a backbone. No major statewide education network had ever been implemented without some "seed" money. However, this self-funded, voluntary participation model forced the project to be zero-base budgeted, and to operate very efficiently and economically (no frills). It also limited the level of communications, marketing, and other trappings of a fully funded network. One of the positives from being self-funded is that this network is financially resilient and insulated from the unpredictability of general fund dollars. Other state networks became dependent on state-appropriated general funds or state universal service funds, and when those funds were interrupted or reduced, it created a funding and sustainability crisis. A solid and consistent funding stream would have enabled Network Nebraska to build out more quickly, and enter into the application layer much sooner. However, any time that State dollars are used as support, then either nonpublic entities are ineligible to participate, or their fee structure would appear higher than public entities.

2. **Statewide Synchronous Video Standards and Equipment.** Network Nebraska's first main purpose was to become an interactive distance education network capable of exchanging credit courses between and among Nebraska high schools and colleges. The NITC Technical Panel was called upon to approve audio and video standards that would permit unlike brands of equipment to interconnect, so the Statewide Synchronous Video Work Group was established to vet emerging industry standards and to set guidelines that would permit interoperability. Yet, even with equipment standards, the K-12 community could not agree on the classroom configuration and display options, so over several years, this incompatibility caused some concern and lack of functionality. It could have been prevented with a much more restrictive and prescriptive equipment convention that some states have adopted when driven by state funding.

Lessons Learned Documentation

3. **One Entity, One Fee vs. One Circuit, One Fee.** When Network Nebraska's cost recovery model was being developed in 2006, it was reasoned that each high-bandwidth copper or fiber circuit that connected to a Network Nebraska aggregation point would be charged a fee, regardless of the entity to which each circuit belonged. That was called the "One Circuit, One Fee" model. As small rural districts began to consolidate, it was called to the attention of the Network Nebraska Advisory Group (NNAG) that this was unfair with respect to costs. The NNAG discussed this issue in 2009 and decided to amend the convention to "One Entity, One Fee" so that the smallest of rural districts would only be charged one fee, regardless of the number of circuits connected to Network Nebraska, and the CIO agreed to implement that approach. This "One Entity, One Fee" approach also spurred some angst between the largest of school districts (e.g. Omaha, Lincoln) and the smallest of school districts (e.g. Lynch, Elba) that all pay the same Participation and Interregional Transport Fees. In response, the NNAG implemented dynamic provisioning where the vendor purchase of Internet is less than the orders received from the 41 Internet purchasers, thus creating cost avoidance in this fund account to pay for other network equipment. The largest entities (e.g. Lincoln, Omaha) now help offset the costs of infrastructure to deliver the Internet.

4. **Diocese of Lincoln Catholic Schools Consortium.** In early 2015, the Office of the CIO was approached by the consortium of 32 Lincoln Diocese Catholic schools to join Network Nebraska as a single school "system", thereby being eligible for "One Entity, One Fee" instead of 32 separate fees. The State Statutes, 86-5,100 and 79-1201.02 did not distinguish private, denominational schools from private, denominational school systems, but the Nebraska Department of Education did in State policies. The NNAG discussed this issue at great length to apply the Legislative language of *"The Chief Information Officer shall establish a cost structure based on actual costs…and shall charge participants according to such cost structure."* A list of criteria was developed to apply to the consortium to perform as a school district, and as long as that criteria was met or exceeded, the One Fee was approved by the CIO. Although outside criticism has subsided, this issue is still controversial to this day. At some level, public and private education may continually be at odds, but less vague legal definitions at the legislative level could ease the difficulties for larger projects that encompass both groups of entities.

5. **Participant-hosted Entities.** The original Legislative charge for Network Nebraska was to "*consist of contractual arrangements with providers to meet the demand of state agencies, local governments, and educational entities as defined in section 79-1201.01."* Unlike other state networks that include nonprofit museums, science centers, zoos, and cultural organizations, Network Nebraska had no such direct responsibility. So, under the umbrella of "meeting the demand of educational entities" (for content sharing), the NNAG developed and recommended to the OCIO an expanded Participation Criteria to include special schools, participant-hosted entities, and public libraries and public library systems, as well as a discounted cost structure for small bandwidth entities. July 1, 2016 is the first season of applying these definitions. With the funding model as it is, and the original goal of the network being to serve educational needs exclusively, the issues could not have been avoided. Legislative updates could have, and could still, simplify the process of including the additional entities beyond the originally defined group.

Lessons Learned Documentation

What went right during the project and how similar projects may benefit from this information
Provide a summary of what went right during the project, including the success or accomplishment, the impact and how future projects may benefit from this information.

Many things went well with Network Nebraska from the project's inception due in no small part to the incredible collaboration between the State of Nebraska and University of Nebraska. It is estimated that no fewer than 30 staff are unselfishly involved with the implementation of this network on an annual basis, with none of them full time employees of Network Nebraska. The level of stakeholder support and pride in the success of the network is another key feature. After nine years of operation, Network Nebraska and the Advisory Group can proudly say that it daily serves 100% of public K-12 education, 100% of public higher education, and over 400,000 students and staff from over 300 separate entities. In addition, Network Nebraska also serves 20% of private K-12 schools, 50% of independent colleges, and the second and third largest public library systems. Many major innovations in participative management and cost recovery made this project successful and the envy of many other states. Several will be mentioned here:

1. **The Collaborative Aggregation Partnership (CAP).** Dating back to 2002, before community anchor institutions, anchor tenancy, and bandwidth aggregation were real terms, a small group of staff from the State Division of Communications, University of Nebraska, Nebraska Educational Telecommunications, Public Service Commission, and Nebraska Information Technology Commission began to meet to discuss joint statewide telecommunications projects. As the Network Nebraska legislation was passed in 2006, the Nebraska Department of Education was added and this monthly meeting of key staff became the operational sounding board for Network Nebraska, and eventually morphed into its project management team. In 2009, the co-chairs of the Network Nebraska Advisory Group became regular attendees and a formal part of the agenda. Short of having a single, vertical administrative and operational team within one organization, CAP meetings have become the key to collaboration between the State CIO and University CIO.

2. **The Network Nebraska Advisory Group (NNAG).** Holding together a large, diverse, statewide consortium of public and private K-20 entities is a difficult and delicate undertaking. In 2009, the NITC Education Council chartered an advisory group of 16 people from public and nonpublic K-12 and higher education as a mirror image of itself to take on the responsibility of providing strategic vision and operational guidance to the State Chief Information Officer. NNAG has dealt with the research and vetting of controversial and futuristic issues and conscientiously provides well thought out recommendations to the State Office of the CIO. By unifying the disparate communities of public and private education, and K-12 and higher education, the NNAG now has the ability to speak in one voice for the benefit of all. The instinctive self-interest responses to issues have been overcome through a shared vision, clear communication, and participative decision making.

3. **Shared Personnel and Shared Infrastructure**. The annual expenditures of comparable statewide networks range between $5 million and $32 million, with dozens to hundreds of employees. Network Nebraska, in contrast, has an annual budget of $1.4 million and ZERO full-time employees. All of the core switches, routers, and appliances are fixed assets of the University of Nebraska Computing Services Network, and the costs are shared proportionally with Network Nebraska. High bandwidth, dark fiber transport development is a joint project with joint funding. Staff members from the OCIO, UNCSN, DAS, NITC and NDE all perform seasonal tasks related to E-rate, procurement, accounting, legal, and infrastructure support and Helpdesk. Carefully orchestrated and managed, the project continues to move along and avoid major mishaps due to the dedicated contributions of many people who take pride in their work.

Lessons Learned Documentation

4. **Significant Cost Savings.** By employing statewide aggregation of Internet access, statewide competitive bidding, and a shared statewide backbone, the savings in overall statewide costs and individual entity costs are almost incalculable. In 2006-07, when the Network Nebraska project first started, Internet unit costs around the State averaged $87 per Mbps per month. In startling contrast, the 2016-17 State master contracts for Internet average $.79 per Mbps per month, a decrease of 99.1%. The current outlay for Internet from K-12 and Higher Education is $368,000 per year. If the 2006 rate is used to compare, this total purchase would be $40.5 million. Between 2007 and 2016, the average per Mbps Wide Area Network (WAN) circuit price has decreased by 40%. The State backbone has tripled in length, bandwidth has increased by a factor of 10, and the annual cost remains about the same. By aggregating demand and averaging the daily usage peaks between K-12 and higher education, this project has experienced significant annual bandwidth avoidance and cost reductions.

5. **Leadership, Collaboration, and Partnerships.** In 2013, the National Association of State CIOs selected Network Nebraska-Education as its top *Cross-Boundary Collaboration and Partnership* recipient among the 12 other projects submitted across the U.S. In 2015, the Harvard University-Kennedy School of Government recognized Network Nebraska as a "Bright Idea" by the Innovations in Government Programming. Over a dozen states have inquired about the Network Nebraska operational model over its nine years of existence. Project management techniques have been used consistently over the life of the project and has, by every estimate, prevented major mishaps and crises while working on a very complex network using a distributed, de-centralized management model. These positive things do not just happen unless there is a small group of dedicated, determined individuals committed to project success. The Office of the CIO, University of Nebraska Computing Services Network, and the Department of Administrative Services should be complimented for their leadership and facilitation in carrying out the original legislative intent of LB 1208 (N.R.S. 86-5,100).

NITC Reporting/Process Improvements and Recommendations

Use this section to insert NITC Enterprise Reporting improvements and recommendations.

The NITC Enterprise Reporting forms and monthly deadlines for reports were helpful in keeping the project on track and to reflect on external communication and updates about the project.

Lessons Learned Documentation

Additional Comments
Use this section to insert comments / concerns not included in any other section.

Key constructs contributing to the success of Network Nebraska and earning the trust of stakeholders:

- We described a network vision from the outset that included cooperative management and some decentralization of network monitoring, and we flexed the vision to meet challenges over time.
- We developed a very factual depiction of the project and we “stayed on message” when meeting with potential stakeholders at their institutions, reinforcing that Network Nebraska belonged to the Participants, not the State.
- The decision to join a voluntary, self-funded project lies with the potential participants. Patience and persistence in sharing factual information brought about positive results.
- Transparency and full disclosure of operations, finances, personnel support, hardware and software helped build a culture of trust and ownership by various stakeholders.
- The Network Nebraska Advisory Group was carefully crafted and composed of technology professionals who were respected by their peers to indirectly represent all the paying Participants throughout many education sectors.
- We approached every challenge with a customer-centered, “can do” attitude of “making it work”.
- We kept Participant fees extremely low and annually communicated network changes and improvements.
- We shared network accomplishments and achievements with the stakeholders to make them feel a part.

Lessons Learned Documentation

General Information			
Project Name			Date
LINK Procurement			12/08/2015
Sponsoring Agency			
Administrative Services			
Contact	Phone	Email	Employer
Bo Botelho	(402) 471-0972	bo.botelho@nebraska.gov	Administrative Services
Project Manager	Phone	Email	Employer
Connie Heinrichs	(402) 471-0975	connie.heinrichs@nebraska.gov	Administrative Services – Materiel Division

Project Start Date	01/14/2013	Estimated End Date	10/31/2013	Project End Date	project cancelled

State Purchasing Bureau contracted with Workday on March 31, 2011 for their SaaS procurement software. During the "Discovery" and "Configuration" phases of Workday Procurement, the State worked with Workday to identify "gaps" between State of Nebraska requirements and system capabilities. The implementation team continually refined Workday configuration and security in an attempt to support the State's procurement and statutory needs. Through an in-depth analysis it was determined that four complex custom integrations/interfaces were needed to support the State's ERP system (EnterpriseOne). Two unique set-ups requiring on-going maintenance were identified and configured to support business processes and appropriate approvals of purchases. The configuration was tested and either did not meet requirements or required an extensive cumbersome workaround. The Workday product also lacks sufficient storage capacity for large contracts which would have required the State to develop an auxiliary data storage solution.

Dual maintenance, reporting and support would be required of both the EntepriseOne and Workday procurement systems because all procurement data would not be in a single location. Workday did not have bid solicitation (Quotation Request) functionality, bid evaluation functionality, or contract management functionality, thus preventing the ability to report from a single system. The State of Nebraska uses the EnterpriseOne Procurement module to procure "stock" items that are directly tied to the EnterpriseOne Inventory module. Workday did not have an inventory solution.

Any data extracted from Workday and interfaced into EnterpriseOne would be a custom application/UBE. Workday updated their code on a weekly basis and "pushed" the new code without prior notification of specification changes to its customers. Every update would have the potential to change the extracted data from Workday; therefore, the interface between Workday and JDE would need to be thoroughly tested and possibly retrofitted with every update. Additionally, Workday pushes

semi-annual updates that require extensive end user testing and possible retrofit of integrations and reports.

In addition to the technical gaps identified previously, Workday simply cannot provide an end-to-end e-procurement system with contract management functionality; therefore the contract was allowed to expire.

Lessons Learned Documentation

General Information			
Project Name			Date
EnterpriseOne System Upgrade			9/25/2015
Sponsoring Agency			
Administrative Services – State Accounting			
Contact	Phone	Email	Employer
Wes Mohling	402-471-0601	wes.mohling@nebraska.gov	State of Nebraska
Project Manager	Phone	Email	Employer
Lacey Pentland	402-471-1462	lacey.pentland@nebraska.gov	State of Nebraska

Project Start Date	10/01/2013	Estimated End Date	05/27/2015	Project End Date	06/30/2015

Key Questions	Explanation
1. Did the scope of the project change? ☒ Yes ☐ No	Expense Management module was not implemented
2. Did the project meet the expectations of the stakeholders? ☒ Yes ☐ No	EnterpriseOne 9.1 and Tools Update were implemented
3. Did the project costs exceed the budget provided? ☒ Yes ☐ No	See Cost Management: Total Costs

Cost Management
Show the actual expenditures compared to planned levels. Break the costs into other categories as appropriate.

Fiscal Year [2014]

Budget Item	Budget at Completion (BAC)	Actual Costs (AC)	Cost Variance (CV = BAC – AC)
Salaries			
Contract Services	$2,230,000.00	$2,677,594.00	($447,594.00)
Hardware	$20,000.00	$15,950.20	$4049.80
Software			
Training			
Other Expenditures*			
Total Costs	$2,250,000.00	$2,693,544.20	($443,544.20)

Other Expenditures include supplies, materials, etc.

Lessons Learned Documentation

Significant Project Milestones Insert additional lines as necessary.					
Milestone	Met	Not Met	Original Date	Actual Date	Impact (if late)
Project Kick-Off	☒	☐	10/16/2013	10/15/2013	
Net Change Workshops	☒	☐	11/01/2013	11/12/2013	
Fit Gap Analysis	☒	☐	12/06/2013	12/06/2013	
CNC – Install Pristine & Mock #1	☒	☐	02/14/2014	02/14/2014	
Modification Disposition #1	☒	☐	05/19/2014	06/20/2014	
Modification Disposition #2 after system is code current (New Milestone added for Project Plan adjustment)	☒	☐	09/15/2014	11/10/2014	This Milestone was added because Modification Disposition had to be completed again
Configuration & Testing – Finance Only due to Fiscal Year End activities	☒	☐	NA	NA	This Milestone was no longer applicable after the project was delayed.
Configuration & Testing – all other modules	☒	☐	12/11/2014	12/11/2014	
Performance Testing	☒	☐	04/14/2015	04/11/2015	
User Acceptance Testing	☒	☐	07/31/2014	03/23/2015	
Go-Live	☒	☐	09/02/2014	04/28/2015	
Production Support Ends	☒	☐	06/30/2015	06/30/2015	

What went wrong during the project and recommendations to avoid similar occurrences in the future

Provide a summary of what went wrong during the project, including the problem or issue, the impact and the recommendation to avoid those occurrences in the future.

- Contract made it difficult to hold Vendor accountable due to:
  - Fixed Pricing which prevented State from adjusting timeline and tasks when issues arose
  - Vendor determined contractors to support project and they did not have the proper skillset
  - Contractor turnover – 12 CNCs over the life of the project
  - Vague deliverables
- Management support of State team:
  - Vendor selection process did not take into consideration recommendations from State team
  - Vendor recommendations took priority over State team's guidance resulting in poor decision making
  - Politics played a large role in decision making
- Vendor's Project Management abilities were poor resulting in:
  - Use of additional State resources
  - Lack of understanding of "Basic Software Development Life Cycle"
  - Unrealistic timeline
  - Missed timeline by one year
  - Budget impacted
- Team morale impacted throughout project for a variety of reasons
  - Management and staff turnover

Lessons Learned Documentation

Recommendations:

- Tighten contractual process:
  - Use formal bid process; include state purchasing bureau for services
  - Listen to System Support Team when selecting vendor
  - Ensure deliverables in contract are specific
- Management should set realistic expectations for conversions/upgrades to take into account all of the behind the scenes work to be done
- Ensure the project plan is exactly what we want/need
- Fund and train additional staff to support upgrades and to keep system code current; to utilize the system to its fullest extent
- Create a team dedicated to the upgrade and a separate team dedicated to supporting Production

What went right during the project and how similar projects may benefit from this information

Provide a summary of what went right during the project, including the success or accomplishment, the impact and how future projects may benefit from this information.

- "Go Live" was successful:
  - Improved End User experience
  - Business continuity went fairly well
  - Limited downtime post go live
  - Limited residual program changes post go live
  - Data conversion was successful
- System was updated to be "almost code current"
- Once decision to restart the implementation was made, the team was able to adjust and move forward successfully

NITC Reporting/Process Improvements and Recommendations

Use this section to insert NITC Enterprise Reporting improvements and recommendations.

- Make the reporting documents (e.g. Project Status form) E-forms
- Provide detailed requirements to primary project contact of NITC expectations, to include reporting and briefing requirements

Lessons Learned Documentation

General Information			
Project Name			Date
Nebraska Statewide Radio System (SRS)			10-15-2014
Sponsoring Agency			
Office of the Chief Information Officer			
Contact	Phone	Email	Employer
Mike Jeffres	402-471-3719	Mike.jeffres@nebraska.gov	OCIO
Project Manager	Phone	Email	Employer
Mike Jeffres	402-471-3719	Mike.jeffres@nebraska.gov	OCIO

Project Start Date	Sept 2009	**Project End Date**	Dec 2012	**Project Close Date**	Oct 2014

Key Questions	**Explanation**
1. Did the scope of the project change? ☐ Yes X No	
2. Did the project meet the expectations of the stakeholders? X Yes ☐ No	
3. Did the project costs exceed the budget provided? ☐ Yes X No	

Significant Project Milestones
Insert additional lines as necessary.

Milestone	Met	Not Met	Original Date	Actual Date	Impact (if late)
Phase I	X	☐	9-23-2009	9-23-2009	
Phase II	X	☐	3-10-2010	3-10-2010	
Phase III	X	☐	10-19-2010	10-29-2010	
Phase IV	X	☐	1-21-2011	1-21-2011	

Lessons Learned Documentation

What went wrong during the project and recommendations to avoid similar occurrences in the future
Provide a summary of what went wrong during the project, including the problem or issue, the impact and the recommendation to avoid those occurrences in the future.

1) TRANSITIONING: Agencies experienced difficulties in several areas that affected their early success using the system, and in some instances had the potential to put users in jeopardy in the performance of their duties. Recommendations:

    a. TRAINING: Needed to be a greater emphasis on training. Plan and budget for double what you think you will need. Also need to plan on continuing the training after initial implementation.

    b. OPERATIONS: The Systems User Group (SUG) could have been implemented earlier in the process. Also, need to ensure that the representation on the SUG is appropriate to represent users and does not consist of only policy or management individuals.

    c. POLICIES: Agencies were accustomed to operating independently for decades. The new system brought local, state, federal, public utilities and neighboring states into the picture. It is unrealistic to expect rapid changes to agency policies to improve interagency communications. However, persistent change must start early in the project. Successful changes to policies and procedures takes facilitation, it involves maturing in the system functions, knowledge of the system (both technically and operationally) to identify problem areas, plans for improvement with identifying steps to improve, and timelines.

2) INTERNAL CHALLENGES: Procurement, financial, fixed assets, reporting and other processes were frequent challenges and did not support the pace of the project implementation. Recommendations:

    a. OWNERSHIP: Clear ownership of procurement, financial, fixed asset and reporting processes. It would have taken significant effort to work out these changes, but in hindsight it probably would have saved duplicated efforts.

    b. AGENCY RESPONSIBILITIES: User agencies had the responsibility to coordinate with the vendor and vendor contractors on equipment installations in their vehicles and their user radio programming. Confirmation from the agencies and the vendor that the installations took place and were acceptable to invoice off the contract took many months. While the user agencies has a responsibility to confirm the installs, the vendor also has a responsibility for correct and timely invoicing.

    c. TROUBLE REPORTING SYSTEM – A trouble reporting system should have implemented earlier in the process as a method for users to report issues/troubles.

3) COVERAGE EXPECTATIONS: Coverage requirements were defined in the RFP and coverage maps were created based on measurements taken from measuring the system coverage statewide over two months. However, users experienced coverage differently based on the various factors that can exist. The team created maps to illustrate different levels of degradation that a user might experience. A coverage map is a tool that provides a picture for where a user should expect their radio to work. It also serves as a useful troubleshooting tool when the user identifies problems where the map shows good coverage. Recommendations:

   a. VEHICLE STANDARDS: Establish vehicle standards early as a guide for installation of equipment.

   b. COVERAGE: Ensure that the agencies understand that factors such as vehicle installation, external interference, the type of antenna, equipment in the vehicle and weather can all impact coverage.

   c. TROUBLESHOOTING: Field troubleshooting practices have to be consistent to isolate problems and document repeating symptoms. When appropriate, joint agency troubleshooting needs to occur. The goal should be to establish common practices for technicians and provide learning opportunities to become more familiar with how the system works.

What went right during the project and how similar projects may benefit from this information
Provide a summary of what went right during the project, including the success or accomplishment, the impact and how future projects may benefit from this information.

1) PROJECT DIVISIONS: Creating divisions of project management and oversight.

   a. PROJECT OWNERS: OCIO, NPPD and Motorola worked out methods to coordinate many different project tasks and timelines owned by the three entities. The project was successful in part because the project was not the sole responsibility of the vendor. There were several project timelines and project managers who continually communicated and made decisions. There were continual streams of communications regarding all aspects of the project – state and NPPD network, tower development, tower builds and acquisitions, purchase order processing, change orders, frequency licensing, federal agreements, agency installations, vendor installations, etc. The timeline was aggressive, but that was openly accepted by the group.

   b. IMPLEMENTATION PHASES: Phasing in the system and taking beneficial use by phase was a positive of the project. Instead of migrating to a new statewide system all at once we migrated in four phases. Agencies were able to deal with challenges at a more manageable pace and recognize the need to modify their radio programming before going statewide by beginning implementation in the western Panhandle. Western Nebraska was also an easier part of the state to license public safety radio frequencies, access local towers to share, and coordinate state tower changes with NSP and NDOR to make room for installing the new equipment. This allowed the team to gain experience with the project issues, anticipate upcoming issues to plan for, adjust our schedules and target our efforts more efficiently in the subsequent phases. As we approached implementing in the eastern end of the state we already had the completed federal spectrum sharing agreement in place to use federal frequencies in the system where we anticipated supplemental frequencies would be needed.

Lessons Learned Documentation

2)	USER GROUP: Creating the System User Group provided a forum to discuss ongoing project challenges with NPPD and the user agencies. This is still a useful forum that is becoming more operationally focused as we close out the project and put the emphasis on users maturing in the system, expanding the user base and developing training materials.
3)	OCIO-NPPD INTERLOCAL AGREEMENT: The interlocal agreement with the Nebraska Public Power District is a model example of many of the right approaches we took in developing the relationship and committing our resources to ensure the project's success. We have routine ongoing discussions concerning the system operation, monitoring, maintenance, user agency support and many other topics.
4)	TROUBLE REPORT SYSTEM: Timely and accurate information is needed to correlate with the system logs and troubleshoot potential causes and effects. We created a web based trouble reporting system that any user or dispatcher could complete AND see what follow-up had been done. This feedback to users has proven to be very valuable.
5)	IT WORKS: The system works. The partnership works. It is always easier to discuss problems and lose sight of the fact that the system functions very well and is orders of magnitudes improved over all previous state radio communications. It covers more than 95% of the state, provides very clear audio and allows many different user agencies to talk at will with any other user anywhere in the system. The partnership with NPPD proved the state can share the ownership and management of a system, and set a tone to continue expanding partnerships with other agencies. The system is successful because we worked to establish best practices while addressing user issues and expectations migrating to a new technology.

Additional Comments
Use this section to insert comments / concerns not included in any other section.

This project was not simply a matter of implementing a large complex communications system and partnership. There were disruptive changes required that included developing interoperability between agencies and understanding how to use the technology.

As can happen with a large enterprise project, we have seen significant changes across the public safety landscape for the better, but this is just a beginning. We learned that providing the tools to communicate well takes time and ongoing effort to continue improving awareness, outreach, education, training, and continually expanding the sandbox as more users of diverse disciplines come on the system. We now have a variety of federal law enforcement and other federal agencies participating in the system, interoperability with 82% of Nebraska counties, most state agencies and increasing interest in local agencies to join the system.

Lessons Learned Documentation

General Information			
Project Name			Date
NeSIS PeopleSoft Campus Solutions ADA Compliance			9/19/2014
Sponsoring Agency			
University of Nebraska			
Contact	Phone	Email	Employer
Jim Zemke	402-472-5195	jzemke@nebraska.edu	UNCSN
Project Manager	Phone	Email	Employer
Don Mihulka	402-472-8344	dmihulka@nebraska.edu	UNCSN

Project Start Date	08/01/2010	Estimated End Date	12/31/2011	Project End Date	09/01/2014

Key Questions	Explanation
1. Did the scope of the project change? x Yes ☐ No	This project began as an effort to assess the level of ADA compliance for the Campus Solutions Student Information System and evolved into a project to also address the compliance short comings that were discovered. Staff were assigned to complete a comprehensive ADA compliance review of Campus Solutions to include not only the base Oracle Campus Solutions system but also all UN/State College system modifications and enhancements. A visually impaired student worker was also hired to assist in this evaluation and he was able to provide unique and very valuable insight into usability and access issues. Modifications were implemented to better align Campus Solutions with UN ADA compliance policy. Additionally, compliance guidelines were established to continually monitor both vendor distributed Campus Solutions system modifications and to guide future system development and modifications to insure future compliance.

Lessons Learned Documentation

2. Did the project meet the expectations of the stakeholders?	X Yes	Yes. The initial expectation was completion of an assessment of the level of Campus Solutions compliance. That was achieved. The project then moved forward to also address the compliance issues that were discovered and to put in place procedures to insure ADA compliance is addressed on a continual basis in the future.
3. Did the project costs exceed the budget provided?	X Yes	No specific budget was established for this project at its outset since the scope of the project could not be determined until the assessment of the level of compliance was determined. Oracle/PeopleSoft, the Campus Solutions vendor, had stated that Campus Solutions was, in their opinion, fully ADA compliant but that was their own subjective opinion. Our analysis did reveal some problems with the base Campus Solutions system when measured against what we (i.e. the University of Nebraska and the State Colleges) felt was a reasonable level of ADA compliance. That, in turn, led to extending the scope of the project to also address these issues and problems and put in place processes and procedure to insure a reasonable level of compliance was maintained in the future.

Significant Project Milestones
Insert additional lines as necessary.

Milestone	Met	Not Met	Original Date	Actual Date	Impact (if late)
Phase I - perform initial ADA compliance evaluation – base Campus Solutions system and core functions.	X		12/31/2011	12/31/2013	
Phase II – perform ADA compliance evaluation for in-house implemented base system modifications (i.e. campus portals, identity management/authentication, online admissions application, etc).	X			3/1/2014	

Lessons Learned Documentation

Phase III – perform ADA compliance evaluation for all in-house developed system modifications and enhancements and ancillary components (i.e. guest access, student dashboards, admin/staff dashboards, etc)	X			6/1/2014	
Develop mitigation strategy and implement modifications and enhancements to improve ADA compliance.	X			9/1/2014	Work continues to migrate the mods and enhancements that have been developed to address identified compliance issues into our production environments.
Put in place processes and procedures to continually monitor ADA compliance and insure future Campus Solutions modifications and enhancements meet the UN/SC reasonable level of ADA compliance standards.	X			9/1/2014	

What went wrong during the project and recommendations to avoid similar occurrences in the future
Provide a summary of what went wrong during the project, including the problem or issue, the impact and the recommendation to avoid those occurrences in the future.

This project evolved over time which resulted in significant scope creep.
However, that occurred because once the initial assessment of compliance was completed it was obvious that we needed to implement changes to address the issues and problems identified during the evaluation phase.
In hindsight, this project could've been broken down into multiple separate projects aligned with the project phases organized around the project milestones noted above.

Progress was slower than we would've liked due to a number of issues.
Staffing constraints and a general lack of knowledge concerning how to best go about evaluating ADA compliance was an issue initially. Additional staff were added to the project to address the staffing issue and time was spent researching and becoming familiar with the testing and evaluation tools and techniques required. We also employed a visually impaired student worker to assist in the evaluation process which was very beneficial.
Once we began the analysis we realized the definition of ADA compliance and "reasonable accommodation", which is institution specific, required clarification. That is, the ADA statutes are quite vague concerning any specific evaluation criteria. Considerable time was spent on research and establishing UN/SC evaluation criteria and finding appropriate tools to assist in the evaluation process.
Evaluation of compliance was then found to be a very time consuming process.
The vendor's position that Campus Solutions was ADA compliant complicated our ability to address some of the compliance issues that were exposed during our evaluation process since we have a policy to minimize modifications to any vendor supplied base system functionality. We did report the findings of our evaluation to Oracle, the Campus Solutions vendor, and they have agreed they will attempt to address the compliance issues we identified in future releases.

Lessons Learned Documentation

What went right during the project and how similar projects may benefit from this information Provide a summary of what went right during the project, including the success or accomplishment, the impact and how future projects may benefit from this information.
Although this project did take much longer to complete than initially anticipated that was largely because the scope of the project was extended from evaluation of ADA compliance levels of the base Campus Solutions system to the actual implementation of modifications, enhancements, and processes and procedures to address compliance on a long-term basis for the entire Campus Solutions system and all associated additional components. As noted above it may have been appropriate to break this entire effort down into multiple smaller projects with more distinct objectives. However, it is doubtful that would have resulted in any time or cost savings.

NITC Reporting/Process Improvements and Recommendations Use this section to insert NITC Enterprise Reporting improvements and recommendations.
If it is desired that the monthly project status updates are cumulative for the duration of the project it is suggested that each monthly entry for each section include a date/time stamp and the initials of the person entering the update for tracking purposes and improved readability.

Additional Comments Use this section to insert comments / concerns not included in any other section.
Monitoring and insuring ADA compliance is an ongoing issue. Not all of the modifications and enhancements required to address identified compliance issues identified to date have been fully implemented in all production environments.

Lessons Learned Documentation

General Information			
Project Name			Date
AFIS Upgrade			March 3, 2014
Sponsoring Agency			
Nebraska State Patrol			
Contact	Phone	Email	Employer
Tony Loth	402-479-4007	Anthony.Loth@nebraska.gov	Nebraska State Patrol
Project Manager	Phone	Email	Employer
Tony Loth	402-479-4007	Anthony.Loth@nebraska.gov	Nebraska State Patrol

Project Start Date	06/12/2013	Estimated End Date	02/13/2014	Project End Date	02/25/2014

Key Questions		Explanation
1. Did the scope of the project change?	☐ Yes ☒ No	
2. Did the project meet the expectations of the stakeholders?	☒ Yes ☐ No	
3. Did the project costs exceed the budget provided?	☐ Yes ☒ No	

Cost Management
Show the actual expenditures compared to planned levels. Break the costs into other categories as appropriate.

Fiscal Year [2013]

Budget Item	Budget at Completion (BAC)	Actual Costs (AC)	Cost Variance (CV = BAC – AC)
Salaries			
Contract Services	$750,000	$750,000	$0
Hardware			
Software			
Training			
Other Expenditures*			
Total Costs	$750,000	$750,000	$0

Other Expenditures include supplies, materials, etc.

Lessons Learned Documentation

Significant Project Milestones Insert additional lines as necessary.					
Milestone	Met	Not Met	Original Date	Actual Date	Impact (if late)
Signed Contract	☒			6/12/2013	
Delivery of Requirements Definition Document (RDD) from MorphoTrak	☒		7/8/2013	7/17/2013	
Approval of Requirements Definition Document	☒		8/6/2013	8/21/2013	No impact
Site Preparation Survey	☒		8/16/2013	8/30/2013	No impact
Procurement of Hardware	☒		9/5/2013	8/23/2013	
Installation/Transition Plan	☒		9/20/2013	10/30/2013	No impact
Approval of Acceptance Test Procedure	☒		9/20/2013	9/30/2013	No impact
Data Migration	☒		11/13/2013	11/18/2013	No impact
Training Plan	☒		11/15/2013	11/15/2013	
Hardware Delivery	☒		12/2/2013	11/4/2013	
Onsite Installation	☒		12/10/2013	11/5/2013	
Go Live/Site Acceptance Test	☒		12/13/2013	12/13/2013	
Final Acceptance (60-day review)	☒		2/13/2014	2/25/2014	

What went wrong during the project and recommendations to avoid similar occurrences in the future
Provide a summary of what went wrong during the project, including the problem or issue, the impact and the recommendation to avoid those occurrences in the future.

Overall this project was very smooth. There were a handful of milestone dates for deliverables that were not met but none of these had an adverse impact on the progress of the project. Final completion was about two weeks late due to some last minute bugs that needed to be resolved.

What went right during the project and how similar projects may benefit from this information
Provide a summary of what went right during the project, including the success or accomplishment, the impact and how future projects may benefit from this information.

In my opinion, communication was the key factor for the success of this project. There was a clearly defined implementation plan established at the very beginning and everyone was on board with that plan and everyone knew the expectations of all parties. When there was going to be a delay on the part of one party or the other, this was communicated to the other party so that adjustments to the plan could be made and expectations could be modified. We held bi-weekly meetings to discuss the status of the project, identify potential hang-ups and adjust our plan as needed. As implementation grew near, these meetings were increased to weekly.

Lessons Learned Documentation

NITC Reporting/Process Improvements and Recommendations Use this section to insert NITC Enterprise Reporting improvements and recommendations.
The form was easy to complete and really helped me to keep the documentation of the project in order. The only suggestion I would have would be to provide an online form to simplify the completion and submission of the form. Ideally we would be able to call up our last monthly report and make changes to it rather than complete it from scratch each month.

Lessons Learned Documentation

General Information			
Project Name			Closed Date
Fusion Center			December 10, 2013
Sponsoring Agency			
Nebraska State Patrol			
Contact	Phone	Email	Employer
Kevin Knorr	(402) 479-4930	Kevin.knorr@nebraska.gov	Nebraska State Patrol
Project Manager	Phone	Email	Employer
Sam Shah	(703) 556-4031 x19874	Sam.Shah@sas.com	SAS/Memex

Project Start Date	05/01/2010	**Estimated End Date**	12/15/2010	**Project End Date**	07/31/2013

Cost Management
Show the actual expenditures compared to planned levels. Break the costs into other categories as appropriate.

Fiscal Year [2012]

Budget Item	Budget at Completion (BAC)	Actual Costs (AC)	Cost Variance (CV = BAC – AC)
Salaries	$0	$0	$0
Contract Services	$1,136,000	$1,136,000	$0
Hardware	$79,982.26	$79,982.26	$0
Software	$943,912	$943,912	$0
Training	$36,000	$36,000	$0
Other Expenditures*	$925,000	$925,000	$0
Total Costs	$3,120,894.26	$3,120,894.26	$0

Other Expenditures include supplies, materials, etc.

The Nebraska State Patrol led this project which would create an intelligence network connecting the Records Management System, Computer Aided Dispatch and most importantly Intelligence records from the State Patrol and the Lincoln and Omaha Police Departments. They would also integrate numerous other data sources to include the Patrol Criminal History, Sex Offender registry and NCJIS. The project would total 17 data integrations.

The budget for the project was $3,120,894.26 that was paid for by Homeland Security Grant Funds and Nebraska State Patrol Seizure funds. No additional state or local funds were required to complete the project as proposed.

Lessons Learned Documentation

CHALLENGES

- The timeline proposed by the vendor was 165 days, which proved to be inaccurate. The last data integration was completed on July 31, 2013, which was 1,186 days after the project began. Delays resulted from a combination of vendor coordination issues, complications relating to dual layer authentication and limited NSP and associated agency IT resources.
- None of the associate agency IT units were prepared to commit the resources required to support the size of this project. The project had reached substantial completion in September 2012 when the initial training was completed and NSP troopers started using the system.

POSITIVES

- Officers now have the ability to query information from multiple agencies including the 17 original data sources all in a single application.
- Officers from multiple agencies can now submit intelligence information and search the entire intelligence database from a single application.
- There are now 38 different agencies across the state that is now sharing information using the Nebraska Fusion information network. The number continues to grow as we train new officers across the state.

LESSONS LEARNED

- Insist that the proposal clearly defines the necessary IT support needed from each of the associated agencies and then have those resources committed at the highest levels within each organization.
- Train the trainer environments have limited success in a law enforcement environment. The different training areas had various levels of enthusiasm and underlying knowledge. This led to varied levels of user acceptance and use of the system. They would recommend a smaller training team and multiple training events presented by one or two teams.
- The NITC reporting process was smooth for the Nebraska State Patrol.

Lessons Learned Documentation

General Information			
Project Name			Closed Date
Law Enforcement Message Switch Replacement			9/10/2013
Sponsoring Agency			
Nebraska State Patrol – Funded by City, County, State and Federal Law Enforcement Agencies			
Contact	Phone	Email	Employer
Suzy Fredrickson	402-471-4545	suzy.fredrickson@nebraska.gov	Nebraska State Patrol
Project Manager	Phone	Email	Employer
Jonatan Guaita	402-471-4545	jonatan.guaita@nebraska.gov	Nebraska State Patrol

Project Start Date	08/01/2011	**Estimated End Date**	05/15/2012	**Project End Date**	01/23/2013

Cost Management
Show the actual expenditures compared to planned levels. Break the costs into other categories as appropriate.

Fiscal Year [2011-2012]

Budget Item	Budget at Completion (BAC)	Actual Costs (AC)	Cost Variance (CV = BAC – AC)
Application Software	$234,000	$234,000 (Omnixx)	$0
System Software	$184,444	$57,141 (BizTalk)	$127,303
Maintenance and Support	$84,872	$0	$84,872
Hardware	$0	$0	$0
Project Management	$127,500	$130,000	-$2,500
Installation	$95,000	$125,000	-$30,000
Integration	$45,000	$35,000	$10,000
Data Conversion	$30,000	$20,000	$10,000
Business Continuity	$25,000	$20,000	$5,000
Migration	$42,500	$0	$42,500
Training	$30,000	$30,000	$0
Documentation	$35,000	$43,200	$8,200
Total Costs	**$856,644**	**$694,341**	**$162,303**

Other Expenditures include supplies, materials, etc.

Criminal Justice Overview:

The Federal Bureau of Investigation (FBI) provides a number of systems and services for use by criminal justice agencies around the country for criminal justice purposes. The FBI has adopted the Criminal Justice Information Services (CJIS) Security Policy that sets forth a number of requirements Nebraska must meet in order to connect to the FBI's criminal justice information repositories.

The CJIS Security Policy requires that each state have a CJIS Systems Agency (CSA) – a criminal justice agency that provides the single connection point for criminal justice agencies in the state to the FBI. The CJIS Security Policy also requires that each CSA has a CJIS Systems Officer (CSO) who is an employee of the CSA as well as an Information Security Officer (ISO).

The Nebraska State Patrol is the CSA for the state of Nebraska and is responsible for administration and management of the statewide law enforcement message switch. Tom Prevo is designated as the CSO responsible for the administration of the CJIS network and Steve Carey serves as the ISO responsible to coordinate information security efforts at all CJIS interface agencies.

Challenges Encountered:

The Nebraska State Patrol implemented the UNISYS switch in 1995 and spent the next 17 years refining every aspect of it. During that timeframe, the Nebraska State Patrol had four subsequent system administrators supporting and advancing the switch functionality. This resulted in the evolution of a very high level of system complexity. Additionally, the UNISYS switch was developed in a proprietary format and had reached its end of life.

Taking these factors into consideration, we understood it would not be a seamless process. This scenario presents any new vendor with quite a challenge when implementing a replacement system without significantly impacting business continuity, which is essential when providing a critical service to all law enforcement within Nebraska, operating in a 24/7 environment.

Thankfully, we had Tom (CSO) and Steve (ISO) on board as longtime resident experts, who were able to work closely with the new switch vendor to provide valuable historical information which was critical to a successful system migration.

Cutover to the new switch occurred on January 23, 2013. The vendor was onsite for the first week to address issues as they were identified and has returned onsite once for follow up work requiring the vendor's full attention. The Nebraska State Patrol continues to have daily conference calls with the

vendor to review reported issues and discuss troubleshooting initiatives. Reported issues are being tracked in a spreadsheet. The daily priorities are identified and assignments made. NSP receives a list of items for testing to verify resolution of issues. NSP is also kept informed of any issues arising with the locals.

Some additional challenges we faced were:

- The switch replacement project began in August, 2011 with a Datamaxx and NSP Project Manager in place.
    - The Project experienced the first vendor Project Manager turnover in June, 2012, and an interim Project Manager was assigned by Datamaxx.
    - The new Datamaxx Project Manager was assigned in July, 2012, and unfortunately, experienced significant health issues off and on throughout the remainder of the project and, as of this week, is no longer with Datamaxx.
    - The NSP Project Manager resigned in July, 2012 and interim Project Manager, Jonatan Guaita was assigned.
    - The new NSP Project Manager, Dan Johnson, was assigned November, 2012.
- The initial project was scheduled to take 9 months but due to the extensive testing and verification of fixes required, it took substantially more time and effort than anticipated and the project was extended an additional 8 months. (Milestone 7 of 10)
- Some of the locals were not following the recommended, not mandated, CJIS standards, therefore, special accommodations had to be put in place to maintain business continuity.

Some positive factors include:

- NSP has worked with Datamaxx since 1986, therefore, Jonathan Waters of Datamaxx was somewhat familiar with our existing system and able to provide some reverse engineering.
- Nebraska was already using the Omnixx user interface on 150 clients. Implementing both a new switch and client software simultaneously would have been significantly more challenging.

Lessons Learned:

It's important to clearly define vendor requirements:

- What is the definition of data migration?
    - Is it just moving data or is it also converting it to a useful format?
    - What if the information to be migrated is in a proprietary format and the former vendor isn't willing to cooperate?
    - It's critical to detail ALL information required to be migrated.
- Define implementation and the expected timeframe.

- It's important to define the criteria the vendor is required to meet after go-live and is expected to remain onsite until complete.
- How will unforeseen issues be addressed as they arise after implementation?

There was little incentive for the vendor to complete the project prior to the six month time frame due to contract language.

- *"The entire retainage amount will be payable upon six (6) months after successful completion of the project."*
- NSP would recommend a shorter period for final payment.
- NSP does not recommend fining a vendor for each day they are late on go-live, as this will be incentive for vendors to implement and incomplete product. Fortunately, we did not use this method on this product or this would have been the case.

Critical need for extensive and accurate testing.

- Testing and database searching guidelines were provided by the vendor and should have been agreed upon by the customer before proceeding.
- Since testing was based on a minimal sample dataset many issues went undetected. All users testing all data will inherently result in the discovery of new issues.
- With the exception of the Towed file, NSP will begin migrating as many HOTfile data sources to the FBI as possible to avoid the need for future modifications specific to Nebraska.

Agencies need to take into consideration the impact of switching vendors after 15+ years have been spent customizing a proprietary system.

- We will continue to persuade locals to become compliant with federal standards to eliminate the need for future customization. (OFML)

Project Reporting Assessment:

We found the reporting process to be efficient and self-explanatory. We used the previous month's report and updated any relevant information.

Lessons Learned Documentation

General Information					
Project Name				Date Closed	
ACCESSNebraska				8/14/2012	
Sponsoring Agency					
Department of Health and Human Services (DHHS)					
Contact		Phone	Email		Employer
Scot Adams		(402) 471-1878	Scot.Adams@Nebraska.gov		DHHS
Project Manager		Phone	Email		Employer
Karen Heng		(402) 471-9644	Karen.Heng@Nebraska.gov		DHHS
Project Start Date	September 2008	**Estimated End Date**	June 2012	**Project End Date**	June 2012

ACCESSNebraska is the re-engineering of Economic Assistance Service Delivery offered by the Department of Health and Human Services (DHHS). ACCESSNebraska utilizes technology and program policy changes to create operational efficiencies. The federal program involved include: Medicaid, Temporary Assistance to Needy Families (TANF), Supplemental Nutrition Assistance Program (SNAP), Low Income Home Energy Assistance Program (LIHEAP), Child Care, Aid to Aged, Blind and Disabled and Social Services Block Grant Program (SSBG).

The project was approved by the Governor in September 2008. Full implementation was completed in June 2012. The project contains four components: Web Services, Document Imaging, Customer Service Centers and Universal Case Management System.

PROJECT HIGHLIGHTS

- ACCESSNebraska project was completed according to planned timelines.
- Project was completed within proposed budget
- ACCESSNebraska transition team guided the project, this included: three project chairs, administrators and supervisors from each service area, a program policy administrator, Information System and Technology administrator and two project managers.
- Project utilized extensive staff involvement – over 30 operational committees.
- Customer service center locations were determined by utilizing a Request for Proposal process.
- Partnerships with the Office of the Chief Information Officer, Administrative Service, State Department of Economic Development, State Department of Labor, State Department of Revenue to develop the Customer Service Centers and the telecommunications system.
- Project was awarded an $824,611 grant from USDA Food and Nutrition Services to assist customers in utilizing technology and to develop electronic submissions of documents.
- Partnerships with community agencies, especially Food Bank of Heartland and Lincoln Food Bank to assist customers in utilizing ACCESSNebraska. DHHS Community Support Specialists working with the community agencies.

Lessons Learned Documentation

PROJECT STRENGTHS

- Utilized research from other state government agencies (Florida and Utah) as well as private business (Cabela's, West Corporation, Verizon) and the University of Nebraska to determine the best solutions and plan for service delivery.
- Utilized a detailed project plan, business plan complete with estimated timeframes.
- Utilized time studies, forecasting and time projections to assess workloads and work volumes.
- Project was developed utilizing state staff from the Office of the Chief Information Officer and the Department of Health and Human Services. Technical Contractor was utilized on the IVR development and the ACCESSNebraska dashboard development.
- Input and involvement of staff, policy and program specialists, technical experts to design the best model.
- Utilized gradual implementation of project components, conducted operational pilots on document imaging system and customer service center with universal case management prior to implementation.
- Extensive testing was completed on all technology prior to pilots and implementation which resulted in very few changes post implementation.
- All components designed to be able to rapidly adjust to changes in policy, service delivery.

PROJECT CHANGES & CONSIDERATIONS

The following are changes that took place from the original plan:

- Document imaging case conversion was completed utilizing 5 regional scanning hubs on the Canon desk top scanners. This change was made due to delays in purchasing and programming of the IBML scanners
- The Scottsbluff Customer Service Center was opened ahead of the Lexington Customer Service Center. The Scottsbluff site needed less remodeling than the Lexington site.
- The Integrated Voice Response System was planned to begin operation in August 2010, this was delayed until November 2010.

The following are considerations of what we would do differently.

- Expertise and experience in Customer Service Center telecommunications operations was a weak point. Consider having a staff member or contractor with this experience on the project.
- Implementation around the Universal Case Management System has to be carefully calculated considering level of staff training and experience. From July 2011 through December 2011, the case volume in the system was greater than the staff available to handle the work load which resulted in long call wait times and work processing delays.
- Staff training needs to integrate the technology and teach the use of all the technology first. Staff should have a comfort level with operating the technology in order to build speed and improve customer service.

Lessons Learned Documentation

General Information			
Project Name			Date Closed
Enterprise Content Management Shared Service			2/14/2012
Sponsoring Agency			
OCIO			
Contact	Phone	Email	Employer
Kevin Keller	402-471-0655	Kevin.keller@nebraska.gov	OCIO
Project Manager	Phone	Email	Employer
Kevin Keller	402-471-0655	Kevin.keller@nebraska.gov	OCIO

The ECM software vendor is OnBase by Hyland Software, and the implementation vendor is eDocument Resources. The ECM project currently has nine agencies participating: Health and Human Services, Roads, Labor, Revenue, Worker's Compensation Court, Office of the CIO, Agriculture, Environmental Quality and Natural Resources.

LESSONS LEARNED

- Set proper expectations to Agencies
- Set proper expectations within our organization
- Don't grow too fast