Project Closeout Report
Presented to the IT Committee Sept. 25, 2014

Project Name: Workforce Data Quality Initiative (WDQI)

Agency: Job Service North Dakota

Business Unit/Program Area: Entire agency

Project Sponsor: Kevin Marchus

Project Manager: Mike Fisher

Objectives		
	Measurements	
Project Objectives	Met/ Not Met	Description
JSND shall have a regular schedule for data collection and reporting generally based on state and federal reporting requirements.	Met	**Measurement:** Identify the processes for collecting data, develop and implement a JSND data warehouse. **Response:** For each dataset, a time schedule has been developed that will upload data from its source. For datasets whose source is a spreadsheet, a timeframe has been determined that Job Service must place the spreadsheet in a secure location prior to the upload. **Measurement:** Enforce individual privacy through business rules programmed into the system. **Response:** Privacy of data in the data warehouse has been setup at the data element level for all data using Cognos Framework Manager and Security. All source data except mainframe data has been moved to a new share with access limited to Job Service staff that need access. Privacy of mainframe source data is controlled using the mainframe's security features. **Measurement:** Maintain operational systems and ensure data quality processes are followed after implementation. **Response:** Data from all programs are on a schedule to load data automatically. Load errors are monitored by ITD.

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Upgrade the reporting technologies.	Met	**Measurement:** Expand the Business Intelligence reporting tool within JSND to deliver reports not only in fixed format, but also to give authorized users increased ability to generate ad hoc reports, create charts, and further analyze the data.
		Response: The Microsoft Business Intelligence tools and SharePoint were selected to create ad hoc reports, charts, and further analyze data.
		Measurement: Provide training for 3 people on the data warehouse and the usage of the data by Nov. 30, 2013.
		Response: During the project, it was determined that only 2 people from Job Service needed training. Two Job Service staff received instructor led online training.
		Measurement: Provide 100% role based security to ensure that all State and Federal privacy and confidentiality regulations are followed by implementation.
		Response: Security of data in the data warehouse has been setup using Cognos Framework Manager and Security.
Provide stakeholders information about the quality of their data.	Met/In progress	**Measurement:** Develop a data validation process that will ensure the data elements supplied conform to their definitions.
		Response: The data elements were verified during user acceptance testing. A high level data validation report was developed for each dataset. Detailed data validation reports were not part of the scope of the project, however, a set of detailed data validation reports are being developed post-project.
		Measurement: Report data quality issues that were identified during the data validation process.
		Response: Detailed data validation reports were not part of the scope of the project, however, a set of detailed data validation reports are being developed post-project.
Demonstrate how longitudinal data can be used to improve workforce and training programs.	Met	**Measurement:** Create a report that shows the outcomes of JSND workforce training programs by showing the change in salary, change in employment status, and program cost per participant by Nov. 30, 2013
		Response: Two reports were created. The Wage Change report and Employment Status report were developed, tested, and implemented.
		Measurement: Create a report that shows high school drop-outs and graduates who do not attend college and their ability to find employment in North Dakota by Nov. 30, 2013. Wages and high school courses taken will be included in the analysis.
		Response: The High School Dropout report was developed, tested, and implemented.
		Measurement: Create a report that represents the effectiveness of programs that are utilized by UI claimants and the effectiveness of the educational and training programs to facilitate rapid re-employment by

		Nov. 30, 2013.
		Response: The UI Claimant Program Participation report was developed, tested, and implemented. On 11/30/13, Job Service decided to spend additional time on user acceptance testing. The additional testing was completed on 02/21/14.
		Measurement: Create a report that provides the supply/demand of job seekers and their ability to obtain employment in North Dakota, including an analysis of job seeker characteristics and industries with openings by Nov. 30, 2013.
		Response: The Job Seek Supply/Demand report was developed, tested, and implemented.
Support agencies collecting the data they believe is needed to inform and improve program information. Support agencies ability to automatically match data files with other agencies.	Met	**Measurement:** Provide the needed workforce data from 8 JSND workforce data sets to ND SLDS which allows for the evaluation of outcomes of the workforce and education participants, and programs by Nov. 30, 2013. **Response:** The following datasets were added to the data warehouse: 1. Wagner-Peyser data (Job Orders and Job Seekers) 2. WIA program and participant data 3. Trade Adjustment Assistance (TAA) program data 4. Employer data 5. Wage data 6. UI claims and payments data 7. Workforce 20/20 data 8. New Jobs training data. **Measurement:** Control 100% access to the data in the JSND data warehouse using role based security by implementation. **Response:** Security of data in the data warehouse has been setup using Cognos Framework Manager and Security. **Measurement:** Access to the JSND data set will be controlled by the data sharing agreement signed 12/28/10. **Response:** During the project, an authorization to perform a study of high school drop outs and graduates and their ability to find employment was signed and attached to the data sharing agreement. All future data requests will be controlled by the Job Service Data Governance committee utilizing the data sharing agreement signed 12/28/10.
Create data definitions, rules, and processes needed to ensure data consistency, quality, and reliability via data governance councils at the State and agency level.	Met	**Measurement:** Establish data governance processes within JSND. **Response:** A Data Governance Plan was developed. The Data Governance Plan contains data rules and definitions, roles and responsibilities, controls, data request flow chart, area of expertise. A Data Governance committee was established to process all data requests and ensure data quality. **Measurement:** Participate at the SLDS level in establishing processes that define available data and usage per the data sharing agreement. **Response:** WDQI project team members from Job Service and SLDS technical team members coordinated the technical strategy for the

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		WDQI data warehouse master person index (MPI) to ensure it will work with SLDS data warehouse MPI. Job Service participated and continues to participate in regular scheduled SLDS committee meetings and the SLDS Executive Steering Committee meetings.

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	20	20	23	15.1% behind	15.1% behind

Budget Objectives					
Met/ Not Met	Original Baseline Budget	Final Baseline Budget	Actual Costs	Variance to Original Baseline	Variance to Final Baseline
Met	$1,005,000	$1,005,000	$1,067,028.42	6.1% over	6.1% over

Major Scope Changes
There were no major scope changes.

Lessons Learned
1. Plan for earlier involvement of key subject matter experts.
2. Identify, document and communicate roles and responsibilities to all parties earlier in the project.
3. Identify knowledge gaps and arrange training to gain skills in those areas.
4. Plan for more on-site involvement of vendors during requirements analysis.
5. Define the requirements and needs of all stakeholders prior to starting design.
6. Allow adequate time for knowledge transfer.
7. Document obligated and actual expenses for each iteration as payment requests are received and include a review of obligated versus actual budget information at all core team meetings where payments are approved.

Success Stories
The WDQI grant project provided resources that helped merge data from two distinct systems (workforce data and education) into a single unified data repository. This provided an additional module to the larger SLDS environment. Additionally, this strengthened the data familiarity and relationships amongst data owners. A positive effect was fostering conversations on how the data can be melded into products and reports revolving around program outcomes, even beyond the specific deliverables of the grant. Work accomplished during the grant process enabled master person index creation. This has allowed better job seeker identification for purposes of attributing demographic detail to them from other internal databases. This will allow reports to be available to Job Service North Dakota local office staff in working with job seekers as they come into their offices. The demographic trends of job seekers, and the tracking of their economic outcomes, will be valuable as scarce resources are allocated. Information can also be shared with Department of Commerce as they work to attract out-of-state job seekers with their different programs and initiatives. Also, due to the groundwork done with this project, a college graduate outcome/accountability report for the ND Department of Commerce and the ND University System can now be pursued by the SLDS research subcommittee. The grant process and steps, has given Job Service staff exposure and training in Business Intelligence tools and processes. Data validation, SQL programming, and report building all occurred during the process that increased the knowledge and skills of staff.