

# IT Plan – Agency Operations

## **Agency:**

Job Service North Dakota is a state agency that delivers employment services to businesses and job seekers, produces the most comprehensive and up-to-date labor market information through the Labor Market Information Center, and administers the Unemployment Insurance program for the state.

The efficient and effective use of IT resources is increasingly critical for JSND. The reduction in Federal funding coupled with the increasing demand for modern technical services has created a confluence of pressures on JSND to create a more sophisticated IT environment with fewer resources.

In order to fulfill its mission to “provide customer-focused services to meet the current and emerging workforce needs of the state,” Job Service North Dakota maintains a central office, operates 16 One-Stop Career Centers (local offices) across the state and hosts the state’s largest job bank at jobsnd.com.

There are a multitude of resources and services available through Job Service North Dakota and their use varies depending on the needs of the individual or employer. Customers can access these resources and services independently, use facilitated self-help services or request personal assistance from Job Service staff.

## **Responsible Party:**

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**Title: IT Manager**

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## **Technology Description:**

### **Current Environment:**

JSND houses and operates a Unisys Libra 4090 mainframe computer. The Libra 4090 is used primarily for UI applications for Benefits and Tax. The core, legacy applications are written in Unisys proprietary language LINC, which is a COBOL application generator. Over the years, JSND has written several web based applications that interface to the Libra 4090 through web services.

We have upgraded the system used for disaster recovery purposes. We now have a fully redundant Unisys Libra model 450 housed in the ITD data center. The lease agreement on the Libra 4090 expires in December 2016, corresponding with the anticipated implementation of iGovern, the new Software as a Service (SaaS) based unemployment Insurance application currently under development.

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This system is mission critical to JSND operations. If this system were nonfunctional, claimants would not receive weekly payments and employer taxes could not be received. In short, the primary functions of JSND would not be possible. Given the critical nature of this system, JSND must ensure that adequate depth and breadth of knowledge is readily available either on staff or through trusted vendor relationships.

Due to technical limitations of the mainframe system, ancillary applications have been developed to provide a more modern and efficient interface and to increase the functionality offered to our customers, mainly through the web. Unisys has developed a proprietary method of communicating from its mainframe environment to other, more open systems, such as web based application servers. These proprietary components are vulnerable to downtime and are very complex and time consuming to rebuild in case of system failure. Technical staff with appropriate skills are getting more difficult to find as most people knowledgeable in this technology are retiring or moving to more industry standard technologies. The same issue is true of LINC. As current staff retire or to augment staff during large projects, JSND has had a difficult time finding qualified programmers. Several attempts to hire programmers internally have been unsuccessful so we have relied on contractors which are typically more expensive. More significantly than the cost, the difficulty in finding skilled staff has a profound limitation on any major programming initiatives that we may wish to undertake; leading to increased project timelines, limited functionality and difficulty meeting federal or state mandates.

In the last biennium, JSND was able to upgrade its Interactive Voice Response (IVR) system. JSND replaced its outdated system with a new system based on the state's telephony infrastructure provided by Avaya. This new system allows for more efficient handling of calls from employers and claimants. High demand services such as filing a claim or certifying for a continued claim are now possible most any time of the day or night without the assistance of a claims center representative.

Using Federal grant dollars, JSND worked with ITD to develop a data warehouse for workforce data. The objectives of this project, Workforce Data Quality Initiative (WDQI) were twofold. The first major objective was to provide a data warehouse to contain long-term data for JSND to be used for evaluating the effectiveness of its many programs dealing mainly with return to work and earnings potential of its clients. The second major objective was to use the WDQI data warehouse as an intermediate repository for JSND data that would ultimately be used by the State Longitudinal Data Study (SLDS). This project received Federal funding and was completed on time and all objectives of the project were met.

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In total JSND operates approximately 630 workstations. About half of these are used for JSND staff and the rest are located in the 16 local offices in resource rooms where the computers are made available for public use. All of the computers used by JSND staff in the Central Office, the local offices and in the resource rooms are maintained and supported by the IT Technical Support staff based in the Central Office in Bismarck. These systems are included in the JSND replacement cycle.

### **Planned activities:**

*JSND will continue to upgrade its current applications and infrastructure. Several components of our environment will be upgraded throughout the biennium. Including: implementation of Microsoft Office 2013, continuation of the 4 year technology refresh cycle and upgrades to our mainframe operating system and associated programs.*

*Additionally, JSND has been a participant in a four state consortium sponsored by the Department of Labor (DOL). The goal of this consortium is to build a SaaS based Unemployment Insurance application to be used initially by the four states. The hope is that more states will join in using this application and ultimately provide a lower cost of ownership by all states involved.*

*Through an extensive RFP process, the consortium has chosen HCLA as the vendor to assist in developing and implementing this application. HCLA previously owned a COTS application designed for stand-alone implementation in each state. This application, called iGovern, is being modified to allow for implementation in a multi-tenant, cloud based environment that can be utilized by multiple states on a SaaS, or usage based cost method. We are currently one year into what is expected to be a three and a half year development and implementation effort.*

*With the planned elimination of the Unisys mainframe environment, there is one additional application that will need to be written on a new platform. That is the time and attendance application, used by JSND for time allocation to the many different Federal grant programs from which we receive dollars. JSND plans to do the analysis and develop a new application or implement a COTS application for this use during the coming year.*

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### **Technologies being watched or investigated:**

*JSND will continue to monitor new technologies and utilize them where it is technically and fiscally sound. The changes in funding mechanisms implemented by the DOL will in some ways drive the direction of technology for JSND. The DOL in recent years has directed most of its funding for new development towards consortium based projects. While the hope is that this will reduce costs for the states involved, it can limit the choices for technology due to the inherent compromises that must be made in a consortium project.*

*JSND is evaluating the options available in implementing Microsoft Office365 and the components of that technology, including - Sharepoint, Lync and Cloud based storage.*