# ALASKA WIC INFORMATION SYSTEM FEASIBILITY STUDY

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# 1 GENERAL INFORMATION

## 1.1 Programs Served

The only program served by the new information system is the WIC Program.

## 1.2 Current WIC Certification System/ Environment

There are several key information systems that support WIC operations in the State of Alaska:

- **WIC Application (AKWIC).** AKWIC is the certification and food benefit issuance system.
- **Vendor Management Module.** A component of AKWIC that supports vendor management activities.
- **Mail Order Vendor System (MOV).** Collects mail order food prescription data from clinic databases which is then made available to the contracted mail order vendor for processing and delivery.
- **State Accounting System (AKSAS).** Also used by other departments outside of WIC, AKSAS maintains financial information.

Further detail about these systems has been provided in *Section 3.4, Analysis of Existing System(s).*

*Business Driver: Fragmented systems and organization structure cause challenges in efficiently operating the WIC Program.*

There are several entities involved in WIC operations in Alaska that interface with or otherwise impact AKWIC. Although a physical diagram of the relationship among the entities that exchange data with AKWIC was not available from the IT staff, the following diagram provides high-level conceptualization of the entities and the flow of information into and out of AKWIC. Although it does not reflect all of the subsystems involved in WIC, this diagram reflects the existing need to:

- Manage 30 local agency servers, and accompanying workstations;
- Coordinate retail vendors as well as a separate Mail Order Vendor (MOV); and
- Communicate with the State Bank/ Banking Contractor.

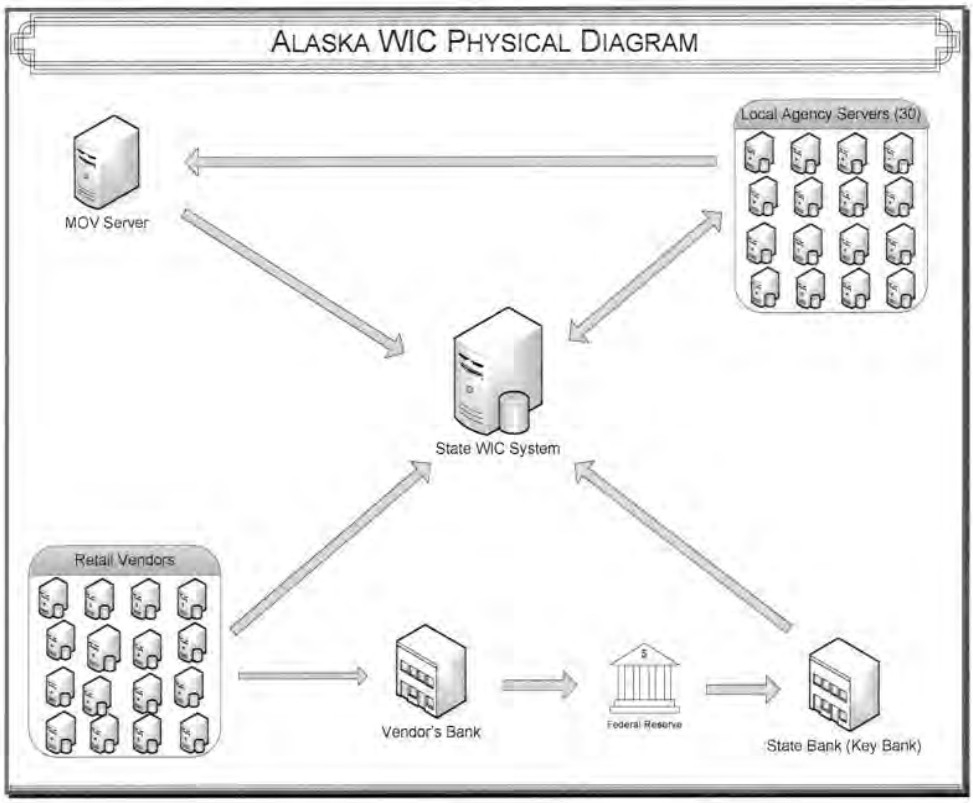


*Exhibit 1-1: Alaska WIC Physical Diagram Conceptualization*

A common concern is that communication and coordination across the various layers of the state government responsible for supporting WIC operations is challenging. Additionally, several of the processes have been identified as cumbersome or inefficient due to the limitations of the fragmented system environment in Alaska, specifically the separate vendor management subsystem and the State accounting system, and tools used by WIC and other State entities. Because AKWIC is a distributed database management system, the local agencies each have their own separate database servers that must be replicated onto the State's main database server nightly. If there are communications errors this process may not run smoothly.

***Business Driver:*** *IT Services is comprised of three sections that are geographically divided between Juneau and Anchorage*

One of the issues identified in the current environment is the reorganization of Information Technology (IT) services. This reorganization has impacted both State and local agency staff and operations of the Alaska WIC Program. The IT Services is divided into three sections with unique responsibilities related to WIC operations: IT Services are geographically divided between Juneau and Anchorage.

## 1.3 Other WIC Program Systems

No other State or local systems will be directly impacted by the implementation of the new system. The system will however, interface with the State's contracted banking services provider. Depending how the MOV module is developed, it may be possible that at a future date the system may be able to interface with systems used by the State's contracted WIC MOV.

## 1.4 Office with Primary Responsibility for Project Coordination

The office with primary responsibility for coordinating this project is the Alaska Department of Health and Social Services, Division of Public Assistance, Family Nutrition Programs, WIC. The main point of contact for the effort is Kathleen Wayne, WIC Director. There is also a Project Manager position that, once staffed, will become the main point of contact and manager for the system transfer project. The Project Manager will be supported by subject matter experts from within the WIC program (specifically, the Project Core Team), as well as the Steering Committee.

## 1.5 Project Roles and Responsibilities of Other Offices within the State

In addition to the WIC program, support will be provided by DHSS Information Technology Services (DITS) which includes assistance from Customer Services, Network Services, and Business Applications units. DITS staff have been involved in planning processes including support of the business process review, participation in sessions to define information system (IS) minimum requirements, identification of potential systems, and the transfer system evaluation process. It is expected that they will be heavily involved in future phases of the project.

Additionally, DHSS Finance and Management Services, Grants and Contracts is involved in the project as it moves into the procurement phase. They will assist with development of the Phase II RFP and oversight of the contract resulting from it.

# 2 SYSTEM TRANSFER CONSIDERATION

The State believes that a transfer system is the best and least costly alternative. State intends to transfer an existing system and make a limited number of modifications to the system to meet the unique needs of the Alaska environment. Rather than release a Request for Proposals (RFP) for design, development and implementation of a system, the State will obtain the code for the selected system in the public domain (i.e., at no cost to Alaska), and then release a RFP for technical support services related to the implementation of the system. This approach allows the State to investigate the available systems to determine the best fit and select that system as a transfer for the new system.

With the support of its planning contractor, MAXIXMUS, the State established a process for selecting the transfer system. The State recognizes its granting agency, USDA FNS, as a valuable resource for determining which WIC IS are viable candidates for transferring to Alaska in the public domain. On May 18, 2006, the State held a call with representatives from USDA and MAXIMUS to finalize the list of potential candidates for consideration. This meeting included the following participants:

- Daniel Collison- Alaska Project Manager
- Kathleen Wayne- Alaska State WIC Director
- Mike Drew- USDA Western Regional Office
- Kathy Tankersly- USDA North East Regional Office
- Terry Kessler- USDA FNS Headquarters
- Patty Davis- USDA FNS Headquarters
- Laurie Hickerson- USDA FNS Headquarters
- Ellen Simon- MAXIMUS
- Amy Duncan- MAXIMUS

Through discussions with USDA FNS and research conducted by MAXIMUS, several information systems were identified as potential candidates. Systems from several States were considered, but, based on technical preferences of the State of Alaska and the vision of the USDA, the list of potential candidates was limited only to robust, web-based

information systems; IS that do not have a web architecture were not considered for further analysis.

Although none were implemented at the time of the initial analysis, systems that are part of a State Agency Model (SAM) project were considered as potential candidates. USDA FNS is actively involved in the SAM projects; therefore these systems are expected to be robust, state-of-the-art systems that will meet the needs of WIC State Agencies in a variety of States. Moving forward, SAM systems are anticipated to be the model systems that are the most ideal candidates for transfer. Federal funding is anticipated to be available for the transfer of SAM systems in the future[1]. The scope of the system evaluation process originally did not include SAM systems because of the anticipated timeframes of the SAM projects; at that time it was understood that the implementation timelines would cause a significant barrier to the Alaska project schedule. Because the first SAM system was implemented in 2007, Alaska determined that it was in the State's best interest to explore the SAM systems to expand the field of potential candidates.

Based on the web criterion, several IS were identified as potential candidates for review[2]. The following table summarizes the potential strengths and challenges (based on a cursory review of the systems) of the systems discussed during the call with USDA FNS. This table presents a high level summary of information available at the time of the analysis.

[1] In addition to a discussion of potential candidate systems, the conference call with USDA included a discussion of the impacts of selecting a SAM system, for example, funding considerations, and process implications.
[2] Please note that some contractors have multiple versions of their products available. This candidate list represents the systems that best meet the technical requirements of Alaska or are the most recently implemented versions of the products.

| System | Contractor | Strengths | Challenges |
|---|---|---|---|
| Iowa IWIN | CIBER | • Robust functionality<br>• Includes "disconnected" access for sites without adequate communications<br>• Selected as MPSC SAM transfer system<br>• Visual basic smart client application with SQL server back end | • Clinic Services module of the system implemented in December 2005 (operational for less than one year at time of initial analysis)<br>• Vendor management module not yet implemented |
| Maryland WOW | 3 Sigma | • Robust functionality<br>• Includes operational clinic/ client, vendor, and finance modules<br>• System has been operational since December 2005<br>• Will include an online training module<br>• Nutrition assessment designed around VENA | • Oracle 9i database would need to be converted or maintained through a service agreement with a contractor<br>• Not smart client<br>• Does not currently include access without an Internet connection. |
| SPIRIT WIC.Net SAM System | Covansys | • Robust functionality<br>• SAM system<br>• Visual basic smart client application with SQL server back end<br>• Electronic signatures | • Not yet implemented- pilot expected to take place in February 2007 with full implementation in summer 2007[3].<br>• Selection of this system would delay AK project |
| Web version of ITCA/ New Hampshire system | Starling | • Expected to have robust functionality<br>• Expected to be a smart client application with SQL server back end | • No known plans for an implementation date<br>• No State is currently contracted to receive the web system<br>• Unknown impact on AK schedule if selected |

[3] At the time of the analysis the pilot was expected for February 2007, but was pushed to May 2007.

Based on the information discussed on the call with USDA FNS, the State of Alaska decided to conduct additional research on the following systems[4]:

- Iowa IWIN
- Maryland WOW
- SPIRIT WIC.Net SAM System

The State of Alaska contacted the states using each of the selected systems and asked that a questionnaire be completed by the State to provide additional information. After learning more about the systems from a questionnaire and on-line demonstrations, Maryland was eliminated because its technical architecture was not consistent with the State's preferences. The final list of candidates became:

- Iowa IWIN
- SPIRIT WIC.Net SAM System

Documentation reviews, and site visits have been conducted for both of the potential candidate systems to gain additional understanding of the system (functionality and technical architecture). Using this information, as well as a thorough review or design and technical documents, the State of Alaska has selected the SPIRIT WIC.Net SAM System to obtain in the public domain for transfer.

[4] The Web version of ITCA/ New Hampshire system was eliminated from consideration based on the uncertainty of its implementation plan. Additionally, because no State is known to have a contract to implement this version of the system at this time. Alaska would not have access to a State partner for support (including interviews related to system functionality and demonstrations of the system) during the system analysis.

# 3 MANAGEMENT SUMMARY

## 3.1 Statement of Objectives

The goal of this project is to obtain the public domain code for a modern, web-based WIC system currently operating in another state. Alaska will then contract with a system design, development, and implementation contractor to modify and implement the system. The objectives expected to be met through the implementation of the new system are to:

- Replacement of the systems currently supporting the Alaska WIC program which runs on older technology.
- Provide to WIC system users a more user-friendly system with improved and enhanced functionality thereby increasing productivity and efficiency.
- Improve service to participants.
- Improve the accuracy of data and reports.
- Reduce the amount of paperwork currently used in the clinic workflow as well as paperwork maintained in files.
- Achieve compliance with federal regulations, policies, and guidance.

## 3.2 System Requirements

The State has determined based on its established IT standards and preferences that the system should meet the following requirements/ preferences:

- Front-end/Programming Language: C#
- Database: SQL Server
- Framework/Platform: .NET
- Should use MS Report services to meet reporting requirements
- Should be a web-based system using the smart client technology
- Must support multiple communications methods: dial up, high speed, satellite

More detailed information regarding system requirements have been included in *Section 4, System Requirements*. System functional

requirements have been documented the State's Functional Requirements document.

## 3.3 Assumptions and Constraints

The approach to transferring the selected SAM system to Alaska was developed based on the following assumptions:

- Alaska will transfer and implement the new system with minimal modifications.
- The existing MOV application will be interfaced with the new system.
- Implementation support such as system modification and configuration, training, QA, testing, and conversion will be outsourced. The State will provide oversight, project management and support as needed.
- The transfer system will be operated in a State data center; basic system support and maintenance (i.e. system monitoring, system and database administration, bug fixes, site support, etc) will be provided by State staff.
- The existing Alaska telecommunications infrastructure is adequate for the transfer system operations. Clinics will be responsible for their own internet connectivity and service, as well as the purchase of their own computers (PCs or laptops) and document printers. The State will provide MICR printers, signature pads, and scanners.

## 3.4 Analysis of Existing System(s)

There are three key information systems that support WIC operations in the State of Alaska:

- **WIC Application (AKWIC).**
- **Vendor Management System**. Supports vendor management activities.
- **State Accounting System (AKSAS).** Also used by other departments outside of WIC, AKSAS maintains financial information.

The following sections outline reported issues and challenges related to these systems.

### 3.4.1 WIC Application (AKWIC)

AKWIC is the certification and food benefit issuance system. The application was developed in-house by the State. It runs on Windows 2000/ XP operating systems and is supported by a SQL database and PowerBuilder Front-End. It is a distributed system, however the master database manages the upload of data from clinic serves through an automated process.

Several issues and challenges related to AKWIC were reported during site visits and interviews for previous components of the system planning project:

- **Participation ID number.** State IT staffs indicated that, although there is an internal programming identification number assigned to each participant, this identification number is transparent to the user. Both State and local agency WIC staffs noted that the lack of a participant ID is problematic because children are moved frequently within family structures and names change. This may lead to dual record entry. *Impact: Since standard practices employed in other WIC transfer systems include the use of participant IDs, data conversion activities must include the use of a unique identifier to each participant record. Additionally, if participant IDs are expected to be used for clinic management, ID cards/ folders would need to be issued.*

- **Record archival.** AKWIC database records have neither been archived nor purged since the system was implemented in 1998; therefore, participants that have been removed from WIC because of categorical ineligibility, transfers, or other reasons remain in AKWIC. The system does not filter out non-active or duplicate participant records for searches and reporting, which creates additional records for staff to review and sort. *Impact: The growing size of the database potentially affects the systems performance. Prior to data conversion, unnecessary records should be archived or purged.*

- **Network outages.** Because the distributed servers frequently go down, many staffs expressed concerns that a centralized system could shut the entire statewide WIC operations down for periods of time. Clinic staffs maintain paper records in addition to system records in case of system outages, which is time-consuming, and creates additional documentation that, must be secured and protected. *Impact: The stability and reliability of network connectivity must be incorporated into the new information system design. Appropriate backup plans and procedures need to be*

*established or updated to deal with network outages with the new IS.*

- **User IDs.** New staff reportedly have had to wait up to three weeks to be issued a system user ID; therefore, clinic staff reportedly share user IDs with the new staff to enable them to work on the system. Additionally, AKWIC functionality does not include date/time or user ID stamp identification on data entered, modified, or deleted in the system. Sharing of user IDs compromises both system security and data integrity. Once a user ID is shared it can continue to be used without the owner's knowledge if the owner does not change their password. *Impact: Possible outcomes of unauthorized use of user IDs include compromised data or access to secured information.*

- **System security.** According to an online survey respondent, former employees' user IDs cannot be removed from the system. A local agency verified that user IDs are maintained in the databank after an employee is terminated. It was unknown if the IDs are locked or access denied to AKWIC. This practice risks compromises both to system security and data integrity. *Impact: network security protocols (to include User ID management) should be included in the new information system design; the State security standards should be incorporated into the new IS design.*

### 3.4.2 Vendor Management Module

This Vendor Management module supports vendor management activities and is integrated with AKWIC. The module was developed in-house by the State. It runs on Windows 2000/ XP operating systems and is supported by a SQL database and PowerBuilder Front-End.

Several issues and challenges are related to the Vendor Management module were reported during site visits and interviews:

- **Tracking.** The Vendor Management Subsystem does not accurately track vendor applications, monitor high-risk vendors, or document WIC food price surveys as reported by vendors. Vendor Management staff must manually track vendor applications and authorization, perform high-risk vendor analysis, and monitor vendors pricing for compliance with peer group price limits. Manual tracking of information in various spreadsheets is both time-consuming and prone to data-entry error. *Impact: The minimum requirements for a new information system should address the functionality that is inadequate.*

- **Reporting.** Staffs reported that the AKWIC vendor reporting functionality is inadequate; therefore, they manually create reports on spreadsheets that are compiled to analyze statewide vendor data and prepare annual USDA reports. Manual documentation and analysis of information are both time-consuming and prone to data-entry error. *Impact: The minimum requirements for a new information system should address the functionality that is inadequate.*

### 3.4.3 Mail Order Vendor (MOV) Subsystem

This system was developed in-house to support operations associated with the delivery of WIC foods by mail. The State has contracted with Fred Meyer as the MOV who has access to the MOV subsystem for the processing and delivery of mail order prescriptions.

The MOV subsystem was also developed using a PowerBuilder front-end and SQL database. The subsystem has the ability to automatically access clinic server databases to collect mail order prescription information and update the master database.

### 3.4.4 State Accounting System (AKSAS)

AKSAS is a statewide accounting system also used by other departments outside of WIC. AKSAS maintains the WIC program financial information. Several issues and challenges were related to AKSAS were reported during site visits and interviews:

- **Formula rebate calculations.** Federal requirements state that formula rebates should be calculated based on redemption patterns or actual purchases. Because vendors are not required to record the actual quantity of formula purchased, the State bases its calculations (and bills the formula rebate contractor) on the quantity allowed on each warrant. The reporting of allowed quantities of contract formula (rather than actual quantities purchased) does not comply with federal regulations. Additionally, rebate requests may not be accurate. *Impact: A new information system should include functionality to record and track actual quantities of contract formula purchased at vendor locations or have the ability to estimate the number of cans purchased per check based of the vendor's reported shelf price. Other statistical analysis may also be needed to determine the redemption patterns.*

- **MOV tracking and reporting.** MOV food costs are tracked separately from the shipping supplies and mailing costs, which

must be manually entered into AKSAS. Additionally, until recently, the MOV classification was not working correctly in the accounting system, which resulted in the information not updating the system correctly or completely. As a result, the Food Instrument Reconciliation Report used to compile the federal 798 report did not include the MOV food costs. State staff must manually verify the accuracy of MOV food, shipping supplies, and mailing costs to ensure they are accurately reported in the 798 reports. Manual tracking of information is both time-consuming and prone to data-entry error. *Impact: A new information system should incorporate reliable transfer of data across State systems.*

- **State and federal fiscal year reporting.** Staffs use spreadsheets to monitor initial grants, grantee payment history, and monthly expenditures needed for State and federal fiscal year reporting. Manual documentation and reporting of information are both time-consuming and prone to data-entry error. *Impact: Functionality to monitor initial grants, grantee payment history, and monthly expenditures needed for State and federal fiscal year reporting should be automated, either in the new WIC IS or within another State tracking system.*

# 4 SYSTEM REQUIREMENTS

## 4.1 Technical Requirements

The following table documents technical standards and preferences for the new Alaska WIC Information System:

- *Preferred*: This column indicates the technical standards currently in place in Alaska or the technology that meets the standards or needs of the State.
- *Acceptable*: This column indicates technology standards that do not completely match the current technical standards in Alaska, but would not pose a significant barrier in selecting the system.
- *Not Acceptable*: This column indicates technology standards that will not be supported by the State.

| Component | Definition[5] | Preferred | Acceptable | Not Acceptable |
|---|---|---|---|---|
| Front End/ Programming Language | A programming language is a stylized communication technique intended to be used for controlling the behavior of a computer. Like human languages programming languages have syntactic and semantic rules used to define meaning. | C# | VB | Java<br>PowerBuilder |
| Database | A database management system (DBMS) is a computer program (or more typically, a suite of them) designed to manage a database (a large set of structured data), and run operations on the data requested by numerous clients. Typical examples of DBMS use include accounting, human resources, and customer support systems.<br>DBMS's are found at the heart of most database applications. Sometimes DBMSs are built around a private multitasking kernel with built-in networking support although nowadays these functions are left to the operating system. | SQL Server | Any other DBMS with an Administrator maintenance agreement | |

[5] Definitions are from wikipedia.com

| Component | Definition[5] | Preferred | Acceptable | Not Acceptable |
|---|---|---|---|---|
| Framework/ Platform | In software development, a framework is a defined support structure in which another software project can be organized and developed. A framework may include support programs, code libraries, a scripting language, or other software to help develop and glue together the different components of a software project.<br>Frameworks are meant to facilitate software development by allowing designers and programmers to spend more time on meeting software requirements rather than dealing with the more tedious low level details of providing a working system. | .NET | | J2EE |
| Other Requirements | | • MS Report services to meet reporting requirements<br>• Web based system using the Smart Client technology<br>• Must support multiple communications methods | | |

## 4.2 Physical Environment

The State of Alaska's standard for operating system software is Microsoft. Server 2003 is the current server OS standard. The back-end database standard is SQL Server 2005, and the application architecture standard is Microsoft .NET. Alaska's vendor of choice for servers and personal computers (both laptops and desktops) is Dell.

For the new WIC IS, Alaska anticipates acquiring a web-based system utilizing an industrial strength back-end database such as SQL Server. Availability and data integrity are both major concerns of the State. The application will need to ensure data integrity, while the database will be expected to enforce referential integrity.

The State has a purchase agreement with Dell, and will utilize the agreement to obtain the necessary server hardware for the new WIC IS. The application will run in a virtual server environment with the data housed in a storage area network (SAN). The environment has built in high-availability with redundant offsite storage to ensure business continuity. Respondents to the WIC IS technical services RFP will be

asked to provide configuration recommendations for the system hardware and OS environments, but the State will purchase and install the necessary hardware and operating system software for both the primary data center and the back-up facility[6].

The local agencies will access the new WIC IS through an Internet Service Provider (ISP) connecting the local agencies offices to the central database.

To ensure business continuity, Alaska will develop a disaster recovery plan. The end goal for the back-up WIC IS will be to assume processing for the primary as quickly as possible following an event that disables the primary WIC IS. One of the challenges for the State will be the communications from the local agencies to the back-up system after the switch over has occurred. The State Network Services Division will have to design connectivity to the local agencies with this contingency in mind. The State would like to have fall-over to the back-up system occur as quickly as possible, but in any event, in no more than four hours.

## 4.3 Telecommunications

The connectivity of all sites is 56 K except for Juneau SEARHC, Anchorage's ANHC, and L Street clinics, which consists of T1 lines. Bethel's Anchorage location is slated to have the newly offered 3 MB TLS. As part of the server consolidation project, IT Network Services upgraded the Anchorage and Fairbanks WIC clinics to T1 lines. The project consolidated all clinic servers on one server located in Anchorage. However, because of telecommunications limitations, clinics in Bethel, Nome, Barrow, Dillingham, Kodiak, Metlakatla, and Kotzebue will maintain servers on-site. Telecommunication connectivity to the villages presents technological challenges to those agencies whose staff travel to the remote clinics or have CPAs onsite. Because of the remoteness of many of the communities in Alaska, satellite communications are common, with the end result that there is additional latency in transaction processing due to the built-in latency in satellite telecommunications. Additionally, sunspots can cause disruption to network services.

Consequently, it is important that the WIC IS application be developed and tuned to operate in a bandwidth limited telecommunications

[6] Based on SPIRIT's architecture, it is anticipated that the current IT infrastructure will support SPIRIT.

environment[7]. A requirement that will be built into the contract with the technical services contractor will be to perform a proof-of-concept demonstration of the WIC IS from a remote site. This demonstration should be scheduled to occur within two months following the start of the technical services contract. The technical services contractor will be asked to utilize the State telecommunication infrastructure from a local agency (such as Bethel) to access the proposed WIC transfer system. The intent of the demonstration is twofold:

1. Obtain an idea of how well the transfer system currently performs within a challenging telecommunications environment; and
2. Provide the technical services contractor with an understanding and appreciation of the challenges being faced in running a web application within the Alaska environment.

The reason for performing the demonstration early within the contract is to ensure that the technical services contractor obtains the understanding of the challenges prior to expending significant effort in the development phase that may need to be redone.

## 4.4 Security

The State of Alaska Governor and Legislature has mandated that all state agencies meet the State of Alaska Information Technology and Telecommunication Security Policies. Consequently the technical services contractor will be required to provide a security plan for the proposed WIC IS prior to its implementation that will ensure the new system is secure and will not compromise the security of the Alaska data processing environment. The Department of Health and Social Services (DHSS) Computer Security Officer and Security Supervisor will approve the requirements for security within the RFP before the RFP can be released. Consequently the DHSS Computer Security Officer and Security Supervisor will be provided access to the draft RFP for a WIC IS technical services contractor for review and comment.

The State of Alaska Information Technology and Telecommunications Security Policies define the requirements for Security. The Security Policy requires that all departments and independent entities employ the

[7] SPIRIT has a disconnected mode, in which records can be used without a reliable connection to the Internet. If telecommunications in the remote areas continue to be a problem, this mode will allow for the processing of WIC functions.

use of "Strong" Passwords on all systems. For the new WIC IS, the policy requires that all passwords shall:

- Have a minimum length of 8 characters;
- Contain at least 3 of the following 4 characters: upper case letter, lower case letter, number, or special character;
- Enable history whereby preventing the use of the last five (5) passwords;
- Expire at 90 days; and
- Lock out user for no less than 30 minutes (1/2 hour) after five (5) invalid attempts.

During an interview with the Network Services IT staff, a recommendation was made that if the new WIC IS application accessible over the Internet, that it should be implemented with Transport Layer Security Protocol (TLS) version 1 with Secure Socket Layer Protocol (SSL) Version 3 compatibility, or with SSL Version 3 by itself. It was recommended that older versions of SSL (prior to Version 3) not be supported because of potential security issues with these versions.

TLS 1.0 is supported in Internet Explorer (IE) 6 or later versions. All WIC desktops are running either Windows Professional 2000 SP4 or Windows XP Professional SP2 with Internet Explorer 7.

## 4.5 Functional Requirements

Using the FReD[8] document as a guide, the State analyzed the functionality in various systems. The following table presents the FReD function, the State of Alaska's determination if the function is required, desired, or not required, and the SAM transfer system functionality[9].

| FReD Reference | Function | AK Requirement? | SAM Transfer System |
|---|---|---|---|
| 3.1 | Certification | | |
| *3.1.1* | *Create and Locate Data Records* | | |
| 3.1.1.1 | Create New Applicant Record | Required | Yes |
| 3.1.1.2 | Search for Applicant/ Participant Record | Required | Yes |

[8] The table below presents a combination of functions described in the 2002 and to-be-released 2008 FReD documents. The numbering scheme is based on the 2008 FReD; any functions that have been removed from the newer version of the FReD are listed as NA

[9] The SPIRIT functionality column was completed initially by the SPIRIT Project Manager and updated based on our understanding of functionality included in the SPIRIT documentation posted on the USDA FNS website.

| FReD Reference | Function | AK Requirement? | SAM Transfer System |
|---|---|---|---|
| *3.1.2* | *Manage Application Process* | | |
| 3.1.2.1 | Maintain Basic Information on Applicant/ Participant | Required | Yes |
| 3.1.2.2 | Screen Applicant for Prior Enrollment | Required | Yes |
| 3.1.2.3 | Determine Adjunct or Automatic Income Eligibility | Required | Yes |
| 3.1.2.4 | Determine Documented Income Eligibility | Required | Yes |
| NA | Maintain Eligibility Documentation and Status | Required | Yes |
| 3.1.2.5 | Maintain Waiting List | Desired | Yes |
| *3.1.3* | *Determine Nutrition Risk of Applicant* | | |
| 3.13.1 | Maintain Applicant Nutrition and Health Characteristics | Required | Yes |
| NA | Perform Dietary Assessment | Required | Yes |
| 3.1.3.2 | Calculate BMI and Produce Automated Growth Charts | Required | Yes |
| 3.1.3.3 | Capture and Document Blood Test Results | Required | Yes |
| 3.1.3.4 | Determine Nutrition Risk and Calculate Priority | Required | Yes |
| *3.1.4* | *Complete Certification* | | |
| 3.1.4.1 | Assess Applicant for Temporary Certification/Presumptive Eligibility Requirements and Documentation Status | Required | Yes |
| 3.1.4.2 | Certify Applicant | Required | Yes |
| 3.1.4.3 | Maintain Proxy Information | Required | Yes |
| NA | Conduct On-going Assessment of Bloodwork Needed | Required | Yes |
| NA | Maintain Participant Data | Required | Yes |
| 3.1.4.4 | Issue Identification Card | Not Required | No |
| *3.1.5* | *Prescribe Food Package* | | |
| 3.1.5.1 | Select and Tailor Food Prescription | Required | Yes |
| 3.1.5.2 | Change Food Prescription | Required | Yes |
| *3.1.6* | *Process Participant Data Changes and Transfers* | | |
| 3.1.6.1 | Change Family/Household Grouping | Required | Yes |
| 3.1.6.2 | Change Participation Status and/or Category | Required | Yes |
| 3.1.6.3 | Process In-State Transfers and Produce VOC | Required | Yes |
| 3.1.6.4 | Process Out of State Transfers and Produce VOC | Required | Yes |
| **3.2** | **Nutrition Education, Health Surveillance, and Referrals** | | |
| *3.2.1* | *Maintain Nutrition Education Data* | | |
| 3.2.1.1 | Create Participant Care Plan | Required | Yes |
| 3.2.1.2 | Track Nutrition Education Contacts and Topics Covered | Required | Yes |
| *NA* | *Assess Individual Participant Dietary Intake* | | |
| NA | Assess/Reassess Dietary Changes in Nutrition Risk | Required | Yes |
| NA | *Is your method for assessing nutrition risk consistent with VENA?* | *Required* | Yes |
| *3.2.2* | *Perform Participant Referrals* | | |
| 3.2.2.1 | Track Incoming and Outgoing Referrals | Required | Yes |
| *3.2.3* | *Provide Voter Registration Information* | | |
| 3.2.3.1 | Provide Voter Registration Information | Required | Yes |
| *NA* | *Provide WIC Health Statistics and Other Information to External Entities* | | |
| NA | Provide WIC Population Data to External Entities | Required | Yes |
| NA | Provide Participant Characteristics Minimum Data Sets to FNS | Required | Yes |

| FReD Reference | Function | AK Requirement? | SAM Transfer System |
|---|---|---|---|
| NA | Provide WIC Participant Characteristics Data to the Centers for Disease Control and Prevention (CDC) | Required | Yes |
| *3.2.4* | *Determine Immunization Status* | | |
| 3.2.4.1 | Screen and Refer Participant for Immunization Services | Required | Yes |
| **3.3** | **Food Management** | | |
| *3.3.1* | *Maintain Food Categories/Subcategories* | | |
| 3.3.1.1 | Maintain Food Category/ Subcategory Table | Desired | Yes |
| *3.3.2* | *Maintain Foods and Food Package Information* | | |
| 3.3.2.1 | Establish and Maintain Approved Foods | Required | Yes |
| 3.3.2.2 | Set up and Maintain Food Package Data | Required | Yes |
| 3.3.2.3 | Determine Food Package Proration Schedule | Not Required | Yes |
| *3.3.3* | *Maintain Food Instrument Data* | | |
| 3.3.3.1 | Record Food Instrument Types | Required | Yes |
| 3.3.3.2 | Establish Food Instrument Maximum Allowed Amounts | Required | Yes |
| *3.3.4* | *Maintain UPC Database and Food Item Maximum Allowed Amounts* | | |
| 3.3.4.1 | Maintain UPC Database for WIC Authorized Foods | Desired | Yes |
| 3.3.4.2 | Establish Food Item Maximum Allowed Amounts | Desired | Yes |
| **3.4** | **Food Benefit Issuance** | | |
| NA | **Maintain Food Package Data** | | |
| *3.4.1* | *Issue Paper Food Instruments* | | |
| 3.4.1.1 | Prepare Individual Food Instruments | Required | Yes |
| 3.4.1.2 | Print Food Instruments | Required | Yes |
| 3.4.1.3 | Process Food Instrument Changes | Required | Yes |
| NA | Maintain Inventory of Food Instruments Issued to Local Agency | Not Required | Yes |
| NA | *Is your method for issuing benefits a check system?* | Informational | Check, Voucher, Direct Distribution, EBT (ready) |
| *3.4.2* | *Issue Benefits via EBT* | | |
| 3.4.2.1 | Establish EBT Account | Desired | EBT-Ready |
| 3.4.2.2 | Add Participant(s) to an Account | Desired | EBT-Ready |
| 3.4.2.3 | Issue Electronic Benefits | Desired | EBT-Ready |
| 3.4.2.4 | Issue EBT Card | Desired | EBT-Ready |
| 3.4.2.5 | Obtain Account Balance | Desired | EBT-Ready |
| 3.4.2.6 | Update EBT Account Information | Desired | EBT-Ready |
| 3.4.2.7 | Remove Participant(s) from an Account | Desired | EBT-Ready |
| 3.4.2.8 | Process Changes to Electronic Benefits (Benefit Adjustments, Voids and Reissuance) | Desired | EBT-Ready |
| 3.4.2.9 | Process Changes to EBT Card (Status Changes/Card Replacements) | Desired | EBT-Ready |
| *NA* | *EBT Functionality* | | |
| NA | Does your system have any EBT functionality? | Informational | EBT-Ready |
| **3.5** | **Food Benefit Redemption, Settlement and Reconciliation** | | |
| *3.5.1* | *Pay Vendor for Food Instruments Redeemed* | | |
| 3.5.1.1 | Compile File of Transaction Data | Required | Yes |

| FReD Reference | Function | AK Requirement? | SAM Transfer System |
|---|---|---|---|
| 3.5.1.2 | Perform Edits and Authorize Vendor Payment | Required | WIC banking process |
| 3.5.1.3 | Process Vendor Payment | Required | WIC banking process |
| *3.5.2* | *Reconcile Food Instruments* | | |
| 3.5.2.1 | Retrieve Food Issuance File | Required | Yes |
| 3.5.2.2 | Retrieve the Food Instruments Redeemed File and Reconcile with Issuance File | Required | Yes |
| 3.5.2.3 | Reconcile Voided, Expired, and Redeemed but Unissued Food Instruments | Required | Yes |
| *3.5.3* | *Pay Vendor for Food Benefits Redeemed via EBT* | | |
| 3.5.3.1 | Process Vendor Payment | Desired | EBT-Ready |
| *3.5.4* | *Reconcile EBT Benefits* | | |
| 3.5.4.1 | Retrieve Benefit Issuance File | Desired | EBT-Ready |
| 3.5.4.2 | Retrieve Transaction History Data / Reconcile Redeemed, Adjusted, Voided, and Expired Benefits with Issuance File | Desired | EBT-Ready |
| **3.6** | **Financial Management** | | |
| *3.6.1* | *Manage Grants and Budgets* | | |
| 3.6.1.1 | Track Grants | Not Required | Yes |
| 3.6.1.2 | Maintain State Agency Budget Information | Not Required | Yes |
| 3.6.1.3 | Maintain Local Agency Budget Information | Not Required | Yes |
| *3.6.2* | *Monitor Program Expenditures* | | |
| 3.6.2.1 | Monitor NSA Expenditures | Not Required | Yes |
| 3.6.2.2 | Monitor Food Expenditures | Required | Yes |
| 3.6.2.3 | Perform Financial Modeling | Not Required | No |
| 3.6.2.4 | Manage Cash Flow | Not Required | Yes |
| *3.6.3* | *Process Manufacturer Rebates* | | |
| 3.6.3.1 | Estimate Total Annual Rebates | Not Required | Yes |
| 3.6.3.2 | Calculate Rebate and Prepare Invoice | Required | Yes |
| 3.6.3.3 | Monitor Rebate Collections | Not Required | Yes |
| **3.7** | **Caseload Management** | | |
| *3.7.1* | *Capture and Maintain Caseload Data* | | |
| 3.7.1.1 | Capture Data on Potentially Eligible Population | Not Required | Yes |
| 3.7.1.2 | Capture Historical Participation Data | Required | Yes |
| *3.7.2* | *Allocate Caseload* | | |
| 3.7.2.1 | Determine Maximum State Caseload | Desired | Yes |
| 3.7.2.2 | Prepare Local Agency Caseload Allocation Estimates | Desired | Yes |
| 3.7.2.3 | Record Caseload Allocations | Desired | Yes |
| *3.7.3* | *Monitor Caseload* | | |
| 3.7.3.1 | Track Actual Participation | Required | Yes |
| 3.7.3.2 | Conduct Caseload Reallocations | Not Required | Yes |
| **3.8** | **Operations Management** | | |
| *3.8.1* | *Monitor Administrative Operations* | | |
| 3.8.1.1 | Maintain Information on Local Agencies and Clinics | Desired | Yes |
| 3.8.1.2 | Analyze Local Agency Operations | Desired | Yes |
| 3.8.1.3 | Support Clinic/ Patient Flow Monitoring | Desired | Yes |
| *3.8.2* | *Manage Participant Outreach* | | |

| FReD Reference | Function | AK Requirement? | SAM Transfer System |
|---|---|---|---|
| 3.8.2.1 | Maintain Outreach List for Local Agencies | Desired | Yes |
| 3.8.2.2 | Track Outreach Campaign Activities | Not Required | No |
| *3.8.3* | *Monitor Customer Service* | | |
| 3.8.3.1 | Document and Track WIC Customer Service Calls | Not Required | No |
| 3.8.3.2 | Document Complaints | Desired | No |
| 3.8.3.3 | Track Call or Complaint Outcomes | Desired | No |
| *3.8.4* | *Provide Survey Capability* | | |
| 3.8.4.1 | Monitor Participants' Views of WIC Program Services | Desired | Yes |
| *3.8.5* | *Maintain Inventory* | | |
| 3.8.5.1 | Maintain Inventory of Serialized Items | Required | Yes |
| 3.8.5.2 | Maintain Inventory of Non-Serialized Items | Not Required | Yes |
| *3.8.6* | *Monitor Program Integrity* | | |
| 3.8.6.1 | Monitor Participant Integrity | Desired | No |
| 3.8.6.2 | Monitor Clinic Integrity | Desired | No |
| 3.8.6.3 | Track Participant Sanctions | Desired | No |
| 3.8.6.4 | Track Administrative Hearings | Desired | Yes |
| **3.9** | **Vendor Management** | | |
| *3.9.1* | *Manage Vendor Peer Groups* | | |
| 3.9.1.1 | Establish Vendor Peer Groups | Required | Yes |
| 3.9.1.2 | Update Vendor Peer Group/Criteria | Required | Yes |
| *3.9.2* | *Create and Locate Data Records* | | |
| 3.9.2.1 | Create New Applicant Record | Required | Yes |
| 3.9.2.2 | Search for Vendor Record | Required | Yes |
| *3.9.3* | *Maintain Vendor Authorizations* | | |
| 3.9.3.1 | Maintain Vendor Application Data | Required | Yes |
| 3.9.3.2 | Track Vendor Authorization Process | Required | Yes |
| 3.9.3.3 | Maintain Vendor Price Survey Data | Required | Yes |
| 3.9.3.4 | Authorize Vendors | Required | Yes |
| 3.9.3.5 | Maintain Authorized Vendor Data | Required | Yes |
| *3.9.4* | *Monitor Vendor Training* | | |
| 3.9.4.1 | Track Scheduled Vendor Training | Not Required | Yes |
| 3.9.4.2 | Track Attendance at Vendor Training and Technical Assistance Conducted | Required | Yes |
| *3.9.5* | *Support Vendor Communications* | | |
| 3.9.5.1 | Produce Correspondence to Vendors | Required | Yes |
| *3.9.6* | *Perform Confidential High Risk Vendor Analysis* | | |
| 3.9.6.1 | Determine Vendor Peer Group (High Risk Analysis) | Required | Yes |
| 3.9.6.2 | Determine High Risk Vendors (Paper Environment) | Required | Yes |
| 3.9.6.3 | Determine High Risk Vendors (EBT Environment) | Desired | EBT-Ready |
| *3.9.7* | *Track Compliance Investigations* | | |
| 3.9.7.1 | Maintain Special Investigator Record for Compliance Buys | Required | Yes |
| 3.9.7.2 | Maintain Food Benefit Redemption Data from Compliance Buys | Required | Yes |
| 3.9.7.3 | Maintain Compliance Buy Data | Required | Yes |
| 3.9.7.4 | Support Inventory Audits | Required | Yes |
| *3.9.8* | *Track Routine Monitoring* | | |

| FReD Reference | Function | AK Requirement? | SAM Transfer System |
|---|---|---|---|
| 3.9.8.1 | Maintain Routine Monitoring Data | Required | Yes |
| *3.9.9* | *Monitor Sanctions and Appeals* | | |
| 3.9.9.1 | Manage Vendor Sanctions | Required | Yes |
| 3.9.9.2 | Monitor and Track CMP Payments | Desired | Yes |
| 3.9.9.3 | Maintain Vendor Appeal Data | Required | Yes |
| *3.9.10* | *Coordinate with Food Stamp Program* | | |
| 3.9.10.1 | Maintain Food Stamp Program Violation Data | Desired | Yes |
| 3.9.10.2 | Report WIC Sanctions to the Food Stamp Program | Desired | Run reports for FSP |
| **3.10** | **Scheduling** | | |
| *3.10.1* | *Maintain Master Calendar* | | |
| 3.10.1.1 | Maintain Master Calendar | Required | Yes |
| *3.10.2* | *Manage Appointments* | | |
| 3.10.2.1 | Perform Appointment Scheduling | Required | Yes |
| 3.10.2.2 | Perform Mass Rescheduling | Not Required | Yes |
| 3.10.2.3 | Track Appointment Outcomes | Required | Yes |
| *3.10.3* | *Generate Appointment Notices* | | |
| 3.10.3.1 | Generate Appointment Notices | Required | Yes |
| **3.11** | **System Administration** | | |
| *3.11.1* | *Maintain System Data Tables* | | |
| 3.11.1.1 | Maintain System Code Table Data | Required | Yes |
| *3.11.2* | *Administer System Security* | | |
| 3.11.2.1 | Locate User Record | Required | Yes |
| 3.11.2.2 | Maintain User Identification | Required | Yes |
| 3.11.2.3 | Maintain User Capabilities | Required | Yes |
| NA | Support centralized control/setup of User Access and Capabilities- | Required | Yes |
| NA | *Support role-based access rules* | *Required* | Yes |
| 3.11.2.4 | Monitor Unauthorized Access- | Required | Yes |
| 3.11.2.5 | Monitor Record Updates- | Required | Yes |
| *3.11.3* | *Manage System* | | |
| NA | Manage Remote System Sites that do not have ongoing telecommunications with central server | Required | Yes |
| NA | *Support offline (from central server) processing from remote Local Agency sites without telecommunications* | *Required* | Yes |
| NA | *Synchronize remote Local Agency sites with central database in an automated, efficient fashion* | *Required* | Yes |
| 3.11.3.1 | Perform System Back-Up/Restoration | Required | Yes |
| NA | Support automated End-of-Day Processing | Required | Yes |
| 3.11.3.2 | Import/Export Data Files | Required | Yes |
| NA | Create/Rebuild Local Agency Clinic Systems | Required | Yes |
| 3.11.3.3 | Provide Version Control | Required | Yes |
| *3.11.4* | *Archive System Data* | | |
| 3.11.4.1 | Archive and Restore Historical Data | Desired | Yes |
| 3.11.4.2 | Purge Unnecessary Data | Desired | Yes |
| **3.12** | **Reporting** | | |
| *3.12.1* | *Generate Standard Reports* | | |

| FReD Reference | Function | AK Requirement? | SAM Transfer System |
|---|---|---|---|
| 3.12.1.1 | Generate Standard Reports | Required | Yes |
| *3.12.2* | *Conduct Ad Hoc Queries and Generate Reports* | | |
| 3.12.2.1 | Conduct Ad Hoc Queries and Generate Reports | Required | Yes |
| *3.12.3* | *Maintain Data Warehouse* | | |
| 3.12.3.1 | Maintain Data Warehouse | Desired | No |

# 5 ALTERNATIVE SYSTEM ANALYSIS

## 5.1 Methodology

This Business Process Review and Information System Planning Project initially tasked MAXIMUS with supporting a review of potential IS candidates available for transfer to Alaska. The scope of this initial task included assessing two systems: Maryland's WOW system and Wisconsin's ROSIE system.

Following a review of these two systems, Alaska adjusted the scope of the project to obtain an existing or soon-to-be deployed WIC IS in the public domain. With this scope change, Alaska identified and researched existing or soon-to-be-deployed WIC Information Systems, examined these systems in their operational environments, and then selected a preferred system to implement. The State will obtain the code for the selected system in the public domain (i.e., at no cost to Alaska), and then release a Request for Proposals (RFP) for technical support services related to the implementation of the system. Technical services include: installation, data conversion, training, implementation support, and a hardware needs assessment.

Through discussions with USDA FNS (*See also Section 2: System Transfer Consideration*) and research conducted by MAXIMUS, several information systems were identified as potential candidates. Systems from several States were considered, but, based on technical preferences of the State of Alaska and the vision of the USDA, the list of potential candidates was limited only to robust, web-based information systems; IS that do not have a web architecture were not considered for further analysis.

USDA FNS is actively involved in the SAM projects; therefore these systems are expected to be robust, state-of-the-art systems that will meet the needs of WIC State Agencies in a variety of States. Moving forward, SAM systems are anticipated to be the model systems that are the most ideal candidates for transfer. Federal funding is anticipated to be available for the transfer of SAM systems in the future[10]. The scope of the system evaluation process originally did not include SAM systems because of the anticipated timeframes of the SAM projects; at that time it was understood that the implementation timelines would cause a significant barrier to the Alaska project schedule. But after learning that the first SAM system would be implemented in 2007, Alaska determined that it was in the

[10]In addition to a discussion of potential candidate systems, the conference call with USDA included a discussion of the impacts of selecting a SAM system, for example, funding considerations, and process implications.

State's best interest to explore the SAM systems to expand the field of potential candidates.

Based on the information discussed on the call with USDA FNS, the State of Alaska decided to conduct additional research on the following systems[11]:

- Iowa IWIN
- Maryland WOW
- SPIRIT WIC.Net SAM System

The State of Alaska contacted the States using each of the selected systems and asked that a questionnaire be completed by the State to provide additional information. After learning more about the systems from the questionnaire, Alaska eliminated the Maryland WOW system from consideration primarily because of the technical architecture. The State conducted on-line demonstrations, documentation reviews, and site visits for the remaining potential candidate systems to gain additional understanding of the system (functionality and technical architecture). Using this information, as well as a thorough review or design and technical documents, the State of Alaska selected the SPIRIT WIC.Net SAM system to obtain in the public domain for transfer.

## 5.2 Requirements and Considerations

*Section 4.5: Functional Requirements* provides a listing of the State of Alaska's functional requirements, as well as the selected system's functionality.

## 5.3 System Alternatives

### 5.3.1 Evaluation Factors

Based on the technical preferences and functional requirements, the State of Alaska reviewed two systems: the SPIRIT system (used by the SPIRIT consortium) and the IWIN system used by Iowa. The State evaluation team reviewed available system documentation, documented questions for each system, participated in online demonstrations, and conducted site

[11] The Web version of ITCA/ New Hampshire system was eliminated from consideration based on the uncertainty of its implementation plan. Additionally, because no State is known to have a contract to implement this version of the system at this time, Alaska would not have access to a State partner for support (including interviews related to system functionality and demonstrations of the system) during the system analysis.

visits to meet with system users for each State. Based on these activities, each evaluation team member completed an evaluation tool to provide scores for each system. Using a standard scoring spreadsheet, evaluation team members documented scores for the Iowa IWIN and SPIRIT systems in several critical areas:

- Rate System Usability
  - ☐ Ease of Use
  - ☐ System Access
  - ☐ Navigation
  - ☐ System Status
  - ☐ Speed
  - ☐ Consistency
  - ☐ User Control
  - ☐ Similarity to Real World
  - ☐ System Messages
  - ☐ Error Notification and Recovery
  - ☐ Help Functions
- Clinic/ Client Operations
  - ☐ Scenarios: Certification/ recertification scenario, Recertify a participant scenario, Transfer a family to another local agency/ clinic within the State scenario, Change a breastfeeding status within an active certification scenario, Void and reissue a Food Instrument scenario, General Scheduler Overview scenario
  - ☐ Additional Questions: Certification, Nutrition Education, Food Benefit Issuance, Caseload Management, Scheduler
- Vendor Operations
  - ☐ Scenarios: Edit an existing vendor scenario, Add a new vendor scenario
  - ☐ Additional Questions: Maximum Allowed Amounts (NTEs), Vendor Applications, Vendor Training, Vendor Monitoring/Compliance Buys/Violations/Sanctions, Price Surveys, Peer Groups, High Risk Vendor reports, Food Baskets, General Questions
- Financial Operations
  - ☐ Scenarios: Determine rebate amount and prepare a rebate invoice scenario
  - ☐ Additional Questions: Rebates, 798 Report, Accounting
- System Administration/ IT Operations

- Scenarios: Food package set up scenario
- Additional Questions: Food package set up, General Questions, Reports, Security, Business Rules, Web Services, Telecommunications, Hardware, Software, and Licensing

- Technical Architecture
  - Technical Architecture Questions

In each of the areas included above, the evaluation team members applied a score to each scored statement (evaluation criterion)[12]. Scores that could be applied to each scored statement included:

- 0: not applicable
- 1: Strongly Disagree
- 2: Disagree
- 3: Neutral
- 4: Agree
- 5: Strongly Agree

The evaluation team consists of subject matter experts in different areas of the WIC Program. Although all team members were active in all areas of the evaluation process, the scores from evaluation team members with specific expertise in an area were weighted to reflect their intimate understanding of the system area. Scores from a team member with a primary responsibility for the area being scored received a weight of 6. All other reviewers received a weight of 1[13]. The following table outlines the specific area of focus for each evaluation team member.

[12] Scored Statements used in the evaluation are provided in *Appendix A: Scored Statements*.
[13] For the clinic and client operations areas, the responsibilities were split to distribute the areas across staff members. In this case, scores from team members with subject matter expertise in the area, but without primary responsibility, were weighted at 3.

| Evaluation Team Primary Responsibilities | | | | | |
|---|---|---|---|---|---|
| | Clinic/ Client Operations | | Vendor | Financial | System Admin/ IT |
| FRED Function | Dana Kent | Caren Webb | Chris Blanchfield | Daniel Collison | Chera Boom |
| Certification | X | X | | | |
| Nutrition Education | X | X | | | |
| FI Issuance: Benefit Issuance | | X | X | X | |
| FI Issuance: Food Package set up | X | | X | | X |
| FI Redemption, Settlement and Reconciliation | | | X | X | |
| Financial Management | | | | X | X |
| Caseload Management | X | X | | | |
| Operations Management | X | X | | | |
| Vendor Management | | | X | X | |
| Scheduling | | X | | | X |
| System Administration | X | | | | X |
| MOV | | | X | X | |

### 5.3.2 System Alternatives Scoring Summary

The following table presents the final weighted scores from the evaluation.

| Calculations | Total Available Weighted Points | % of Total | IWIN Score | SPIRIT Score |
|---|---|---|---|---|
| ***Total Number of points*** | ***10765*** | ***100%*** | | |
| Rate System Usability | 375 | 3% | 169 | 180 |
| Clinic/ Client Operations | 3765 | 35% | 2010 | 2213 |
| Vendor Operations | 2850 | 26% | 1032 | 1242 |
| Financial Operations | 1300 | 12% | 296 | 551 |
| System Administration/ IT Operations | 2000 | 19% | 1190 | 1363 |
| | | **Total Awarded Points** | **4697** | **5549** |

Based on the intensive review of the candidate systems, the evaluation team recommends the SPIRIT WIC.Net SAM System for transfer to Alaska.

## 5.4 Maintenance/Operations Alternatives

The State has determined that the current IT environment could support the selected system. The State may wish to host and operate the system in-house based on a variety of factors, including the proximity of another hosting site to Alaska (including challenges of connecting to a remote host thousands of miles away and management across time zones), as well as the State's ability to access their own data, but would also like to explore contracted hosting and support service options to determine the best value for Alaska.

# 6 PROPOSED SYSTEM

The selected system appears to have the features and functions that the evaluation team members feel will best meet the needs of the Alaska WIC Program with minimal system modifications. When considering the options available, the team noted several key areas in which the SPIRIT system would be the best alternative for transfer:

- **Flexibility in Implementing Business Rules**: The SPIRIT system is designed as a SAM system, which means that it is anticipated to be used by multiple State Agencies and was, in fact, developed for use by thirteen unique State Agencies. The system has a rich business rules function that allows State customization of specific system features and functions without code changes. For example, the system is designed with several benefit delivery methods including checks, vouchers, EBT, and direct distribution; the State can select their preferred method through business rules.

- **Sophisticated Ad Hoc Reporting Tool**: The SPIRIT system includes a plethora of canned reports, but also allows authorized users to create ad hoc reports using an integrated report generator tool. Trained users simply select the fields they wish to display, format the layout of the report, and produce the report in hard copy, saved to pdf, or transported to excel. The State Agency can determine which users should have access to this tool. Evaluation team members noted that the use of the ad hoc report generator would reduce the number of help desk requests for specialized reports.

- **Value Enhanced Nutrition Assessment (VENA) Flexibility.** VENA is a method of assessing nutrition risk holistically by asking questions about lifestyle and food choices, rather than assessing a recall of foods consumed in the 24 hours preceding the WIC appointment. VENA questions are not specifically defined at a Federal level and need to be created to accommodate the State Agency's population. The SPIRIT system is designed to allow for changes to VENA questions without significant coding changes.

- **Certification Guided Script.** The SPIRIT system includes a guided script that helps staff members complete the certification process. As screens are accessed for data entry, the system checks the screen component off on a list of steps required for the certification. Certification cannot be completed and food benefits cannot be issued until the required components of the guided script are complete. This would assist new staff members in remembering to complete all required functions during a certification appointment.

- **Significant Documentation and Help Functions.** The SPIRIT system includes a significant amount of detailed design documentation, which will be critical to the transfer of the system. It also includes a comprehensive online help function that allows users to look up information from the screen to provide information when questions arise.

- **Advanced Technology Implementations.** Although the advanced technology features do not need to be used by Alaska, SPIRIT is built to accept electronic signatures and scan documents (such as proof documents of prescriptions) to support paperless operations.

- **Complete Implementation of All Modules.** The SPIRIT system, as implemented in the pilot, includes all modules that will be built for the system. There is a price survey component that is not yet in use, but has been built.

- **SAM System.** The SPIRIT system is a SAM system that was developed to be transferred and reflects the combined needs of thirteen unique State Agencies. By selecting a SAM system, Alaska may be better positioned to join a partnership to share costs in the future.

- **Disconnected Laptop Use.** The SPIRIT system includes a mode in which laptops can function without direct connection to the Internet. For sites with limited or no telecommunications access, this option may be necessary to operate clinics.

# 7 PROPOSED SCHEDULE

This section provides a listing of milestones and deliverables expected in the selected system transfer project. This section also includes an indicator of primary responsibility and an approximate timeframe for each activity.

| Key Milestones/Deliverables | Responsible Party (Primary) | Timeframe |
|---|---|---|
| **Planning** | | **January 2009-April 2009** |
| RFP | State IS Project Manager | January 2009-April 2009 |
| Vendor Proposals | Bidders | |
| Contract | State Procurement Office | |
| **Design** | | **May 2009-June 2009** |
| Project Initiation | Technical Services Contractor | May 2009-June 2009 |
| Final Workplan | Technical Services Contractor | |
| System Requirements Document | Technical Services Contractor | |
| Planning Documents | Technical Services Contractor | |
| Gap Analysis | State Program Office, Technical Services Contractor | |
| **Development** | | **July 2009-March 2010** |
| Business Process Review/ Policy Adjustment | State Program Office | July 2009-March 2010 |
| System Modification, Technical Testing, and Revisions | Technical Services Contractor | |
| Site Readiness Checklists | Technical Services Contractor | |
| Equipment Procurement (Pilot) | State IS Project Manager, Local Agencies | |
| Operational Planning, Documentation, and Training Materials | Technical Services Contractor | |
| Central Operations Preparation | Technical Services Contractor | |
| User Acceptance Testing | Technical Services Contractor | |
| **Pilot Operations** | | **April 2010-June 2010** |
| Training (Central Office- IT) | Technical Services Contractor | April 2010 |
| Training (Pilot Clinic and State) | Technical Services Contractor | April 2010 |
| Data Conversion (Pilot) | Technical Services Contractor | April 2010 |
| System Pilot Test- 3 Month | Technical Services Contractor | April-June 2010 |

| Key Milestones/Deliverables | Responsible Party (Primary) | Timeframe |
|---|---|---|
| Pilot Evaluation and System Modification/ Retesting | Technical Services Contractor | June 2010 |
| **Statewide Rollout** | | **July 2010 – December 2010** |
| Equipment Procurement (Statewide) | State IS Project Manager, Local Agencies | 3-6 months before go- live date |
| Statewide Training | Technical Services Contractor | July- December 2010 |
| Data Conversion (Rollout) | Technical Services Contractor | July- December 2010 |
| System Rollout | Technical Services Contractor | July- December 2010 |
| System Documentation | Technical Services Contractor | December 2010 |
| **Maintenance** | | **Begins January 2011** |
| Initial 1 Year Warranty | Technical Services Contractor | January 2011- January 2012 |
| Extended Warranties | Technical Services Contractor | Optional |

# APPENDIX A: SCORED STATEMENTS

The following list contains the scored statements used in the evaluation of the systems[14]. Statements were given a score between 0 and 5.

| # | Question |
|---|---|
| 2.2 | **Rate System Usability** |
| 2.2.1 | Ease of Use |
| 2.2.2 | System Access |
| 2.2.3 | Navigation |
| 2.2.4 | System Status |
| 2.2.5 | Speed |
| 2.2.6 | Consistency |
| 2.2.7 | User Control |
| 2.2.8 | Similarity to Real World |
| 2.2.9 | System Messages |
| 2.2.10 | Error Notification and Recovery |
| 2.2.11 | Help Functions |
| 3.1 | **Clinic/ Client Operations** |
| | *Scenarios* |
| 3.1.1 | Certification/ recertification scenario |
| | Rate the system's completion of the scenario. |
| | Rate the system navigation/ steps in the process to complete this scenario. |
| | Rate how well the data collected by the system for this scenario meets the needs of Alaska. |
| | Rate how closely the activities performed during the scenario match the current Alaska environment. |
| 3.1.2 | Recertify a participant scenario |
| | Rate the system's completion of the scenario. |
| | Rate the system navigation/ steps in the process to complete this scenario. |
| | Rate how well the data collected by the system for this scenario meets the needs of Alaska. |
| | Rate how closely the activities performed during the scenario match the current Alaska environment. |
| 3.1.3 | Transfer a family to another local agency/ clinic within the State scenario |
| | Rate the system's completion of the scenario. |
| | Rate the system navigation/ steps in the process to complete this scenario. |
| | Rate how well the data collected by the system for this scenario meets the needs of Alaska. |
| | Rate how closely the activities performed during the scenario match the current Alaska environment. |
| 3.1.4 | Change a breastfeeding status within an active certification scenario |
| | Rate the system's completion of the scenario. |
| | Rate the system navigation/ steps in the process to complete this scenario. |
| | Rate how well the data collected by the system for this scenario meets the needs of Alaska. |
| | Rate how closely the activities performed during the scenario match the current Alaska environment. |
| 3.1.5 | Void and reissue a Food Instrument scenario |
| | Rate the system's completion of the scenario. |
| | Rate the system navigation/ steps in the process to complete this scenario. |
| | Rate how well the data collected by the system for this scenario meets the needs of Alaska. |
| | Rate how closely the activities performed during the scenario match the current Alaska environment. |

[14] Please note that some questions are numbered to cross reference to a tool used to track findings from online demonstrations in the summer of 2006.

| # | Question |
|---|---|
| 3.1.6 | General Scheduler Overview scenario |
| | Rate the system's completion of the scenario. |
| | Rate the system navigation/ steps in the process to complete this scenario. |
| | Rate how well the data collected by the system for this scenario meets the needs of Alaska. |
| | Rate how closely the activities performed during the scenario match the current Alaska environment. |
| | *Additional Questions* |
| | Certification |
| | System supports Alaska's need for multiple ways to search for participants (example: client type). |
| | System supports Alaska's goal of minimizing hard copy files of client records. |
| | System supports Alaska's desire for flexibility for certifying and issuing benefits to participants in remote and isolated locations. |
| | System supports Alaska's need to have risk codes that mirror the federal risk codes. |
| | System supports Alaska's desire for flexibility in entering client data and chart notes |
| | System supports Alaska's requirement for certifying participants without access to central server |
| | Nutrition Education |
| | System supports Alaska requirement that system be VENA compliant. |
| | System supports Alaska's desire for disabling a nutrition assessment / VENA question without compromising client historical data. |
| | Food Benefit Issuance |
| | System supports Alaska's need for maximum user flexibility in distributing food package items among two or more sets of printed food instruments. |
| | System supports Alaska's desire for participant and all proxy names to be printed on food instrument. |
| | System supports Alaska's desire for farmer's market warrants to be system-generated as opposed to issued outside of system. |
| | System supports Alaska's desire for minimal data entry prior to FI issuance. |
| | System supports Alaska's requirement that the confirmation of receipt for food instruments includes a space for the participant's signature. |
| | System supports Alaska's requirement for reasonable oversight of non-contract formula issuance. |
| | System supports Alaska's desire to issue benefits to participants who have been certified off-site from a clinic? |
| | System supports Alaska's requirement that food instruments can be mailed to participants. |
| | Caseload Management |
| | System supports Alaska desire for tailoring participant survey questions at the State Agency, Local Agency and clinic levels. |
| | System supports Alaska desire for recording and tracking WIC inventories. |
| | System supports Alaska requirement of assigning and tracking participant caseload to Local Agencies. |
| | Scheduler |
| | Scheduler meets Alaska requirement of flexibility to be set-up at different levels (e.g. staff member, clinic, local agency, State agency staff, etc.) |
| | Scheduler meets Alaska's need for flexibility at the Local Agency and clinic levels for defining appointment types and time increments. |
| | Scheduler meets Alaska requirement of being able to schedule family members for concurrent or consecutive appointments |
| | System supports Alaska's need for a variety of appointment views on-screen and in print-out reports (example: client detail versus daily summary). |

| # | Question |
|---|---|
| | System supports Alaska's need for minimally required participant information at the time of prescreening or initial scheduling of appointment. |
| | System supports Alaska's need to certify clients and issue benefits without ever accessing the scheduler module. |
| 4.1 | **Vendor Operations** |
| | *Scenarios* |
| 4.1.1 | Edit an existing vendor scenario |
| | Rate the system's completion of the scenario. |
| | Rate the system navigation/ steps in the process to complete this scenario. |
| | Rate how well the data collected by the system for this scenario meets the needs of Alaska. |
| | Rate how closely the activities performed during the scenario match the current Alaska environment. |
| 4.1.2 | Add a new vendor scenario |
| | Rate the system's completion of the scenario. |
| | Rate the system navigation/ steps in the process to complete this scenario. |
| | Rate how well the data collected by the system for this scenario meets the needs of Alaska. |
| | Rate how closely the activities performed during the scenario match the current Alaska environment. |
| | *Additional Questions* |
| | Maximum Allowed Amounts (NTEs) |
| | System supports Alaska requirement of basing NTE values on redemption data. |
| | System supports Alaska requirement of basing NTE values on a number of standard deviations above an average price. |
| | System supports Alaska requirement of basing NTE values at the peer group level. |
| | System supports Alaska requirement of calculating NTE values on a three-month rolling average of price data by peer group. |
| | System supports Alaska requirement for user flexibility in adjusting NTE values. |
| | Vendor Applications |
| | System supports Alaska requirement of supporting multiple contract periods for one vendor. |
| | System supports Alaska requirement of associating vendor with a corporate parent. |
| | System supports Alaska requirement for a defined vendor contract cycle (example: a three-year contract beginning on July 1). |
| | System supports Alaska requirement to capture supplementary vendor information (example: food and non-food sales, FSP and non-FSP food sales information). |
| | Vendor Training |
| | System supports Alaska requirement for scheduling and capturing data related to vendor training activities. |
| | Vendor Monitoring/Compliance Buys/Violations/Sanctions |
| | System supports Alaska's requirement for both State and Local Agency staff to conduct vendor monitorings or compliance buys. |
| | System supports Alaska's desire for collection of appropriate data during a vendor monitoring or compliance buy. |
| | System supports Alaska's desire to appropriately assign violations, related sanction points and/or fines stemming from a vendor monitoring, a compliance buy or complaints. |
| | System supports Alaska's requirement for appropriately defining what constitutes a vendor violation. |
| | System supports Alaska's requirement for appropriately assigning points to a violation. |
| | System supports Alaska's requirement for assigning vendor violation points for an appropriate period of time. |
| | System supports Alaska's requirement for appropriately assigning vendor functions to vendor status (example: a vendor on probation status may not allow vendor to accept food instruments). |

| # | Question |
|---|---|
| | System supports Alaska's requirement for tracking and recording of activities associated with vendor hearings and/or appeals. |
| | System supports Alaska's requirement for creating, printing and tracking redemption of food instruments associated with compliance buys. |
| | Price Surveys |
| | System supports Alaska requirement for submission of electronic vendor price surveys and importing electronic price survey data into the system. |
| | System supports Alaska requirement for retaining historical record of price survey data. |
| | System supports EBT requirement to capture pricing data by UPC code. |
| | Peer Groups |
| | System supports Alaska requirement that vendors be assigned to peer groups and recorded in the system. |
| | High Risk Vendor reports |
| | System supports Alaska requirement for a series of reports to identify vendors who may be at risk for fraud or abuse. |
| | System supports Alaska requirement for a user flexibility in defining variables for high risk vendor reports (example: food instrument types selected for low variance report, or percent threshhold for low variance report.) |
| | System supports Alaska's desire for a vendor high risk score that is calculated from a variety of factors. |
| | Food Baskets |
| | System supports Alaska requirement for creation of unique food baskets for each peer group for the purposes of comparing price survey data. |
| | General |
| | System supports Alaska's desire to capture supplier information. |
| | System supports federal requirement to track vendor purchase of formula from state approved retailers or wholesalers. |
| | System supports Alaska's requirement for a federally compliant TIP report. |
| | System supports Alaska's requirement for assigning a vendor to a Local Agency and/or a staff member. |
| | System supports Alaska's requirment for displaying vendor redemption history, including number of redemptions and $ amount of redeptions for a specified time period. |
| **5.1** | **Financial Operations** |
| | *Scenarios* |
| 5.1.1 | Determine rebate amount and prepare a rebate invoice scenario |
| | Rate the system's completion of the scenario. |
| | Rate the system navigation/ steps in the process to complete this scenario. |
| | Rate how well the data collected by the system for this scenario meets the needs of Alaska. |
| | Rate how closely the activities performed during the scenario match the current Alaska environment. |
| | *Additional Questions* |
| | Rebates |
| | System supports Alaska requirement of recording multiple rebate suppliers and associating multiple contract periods with each rebate supplier. |
| | System supports Alaska requirement of retaining historical data related to contract formula prices. |
| | System supports Alaska requirement of recording contract price amendments for a particular rebate contract. |
| | System supports Alaska requirement of creating multiple rebate invoices for the same time period for different vendors. |

| # | Question |
|---|---|
| | System supports USDA requirement of basing infant formula rebate invoices on a statistical estimate of the number of cans of formula sold for each food instrument. |
| | System supports USDA requirement of creating an electronic data file – at the detail level – of all records that contribute to an infant formula rebate invoice. |
| | 798 Report |
| | System supports Alaska requirement of generating a 798 report that accurately reflects food costs and rebates. |
| | System supports Alaska requirement of reporting food costs to within 0.5% of state accounting system's record of food costs. |
| | System supports Alaska desire for system-generated 798 report to appropriately exclude food instruments that were not redeemed or deposited within a valid timeframe |
| | System supports Alaska need to generate a 798 report which projects food costs and rebates that incorporate such factors as inflation and caseload fluctuations. |
| | Accounting |
| | System supports Alaska requirement of a daily exchange of issuance files and paid/not paid files between the state agency and a banking contractor. |
| | System supports Alaska requirement for State review and disposition of problem food instruments as paid or rejected. |
| | System supports Alaska requirement for capturing and updating vendor bank data and transmitting it to a banking contractor. |
| **6.1** | **System Administration/ IT Operations** |
| | *Scenarios* |
| 6.1.1 | Food package set up scenario |
| | Rate the system's completion of the scenario. |
| | Rate the system navigation/ steps in the process to complete this scenario. |
| | Rate how well the data collected by the system for this scenario meets the needs of Alaska. |
| | Rate how closely the activities performed during the scenario match the current Alaska environment. |
| | *Additional Questions* |
| | Food package set up |
| | System supports Alaska's desire for a user-friendly process for establishing a food package |
| | System supports Alaska's desire for a user-friendly process for customizing a food package. |
| | System supports Alaska's requirement that food packages not only define food items, but other factors such as package size or form (i.e. standard milk, powdered or evaporated). |
| | System supports Alaska's requirement for incorporating and distinguishing between contract and non-contract formulas in food packages. |
| | System supports Alaska's desire that model food packages can be established and/or modified with minimal application coding changes to the core system. |
| | System supports Alaska requirement that modifications to food package do not result in changes to historical prescription data involving the same food packages issued prior to the change. |
| | System supports Alaska requirement for appropriate checks to prevent user from over- or under-prescribing food items. |
| | General |
| | System supports Alaska requirement for downloading client data onto laptop and checking data back into central database. |
| | System supports Alaska's desire to capture address information and associate it with appropriately defined political boundaries. |
| | System supports Alaska's requirement for data integrity, so that discrepancies in data are minimized. |
| | System supports Alaska's desire for a simplified process of synchronizing files at end-of-day. |

| # | Question |
|---|---|
| | Reports |
| | System supports Alaska's desire for users to create custom reports. |
| | System supports Alaska's requirement that users have flexibility in defining report date parameters. |
| | Security |
| | System supports Alaska requirement for multiple security layers that can be defined by the State Agency, but implemented at lower levels of the organization (example: Local Agencies or clinics). |
| | System supports Alaska requirement for acceptable security standards. |
| | Business Rules |
| | System supports Alaska requirement for a process to implement busness rules that enables program staff to easily change business rules with minimum changes to system code. |
| | Web Services |
| | System supports Alaska requirement for maximizing web service functionality. |
| | System supports Alaska requirement for adding components to system in a manner which has minimal impact on the core system. |
| | System supports Alaska requirement for utilizing a current and acceptable version of SQL server. |
| | Telecommunications |
| | System supports Alaska desire for accessing the system via the public internet in a secure manner. |
| | System supports Alaska requirement for implementing a telecommunications strategy for poorly connected sites so that performance at these sites is comparable to well-connected sites. |
| | System supports Alaska requirement for optimizing or caching internet traffic. |
| | Hardware, Software, and Licensing |
| | System supports Alaska need for hardware, software and licensing requirements that are reasonable as regards to budgetary constraints and requirements for technical support. |
| | *Technical Architecture* |
| | Technical Architecture Questions |
| | Rate how well the telecommunications approach meets the needs of Alaska. |
| | Rate how well the database structure and design meets the needs of Alaska. |
| | Rate how well the system architecture and design meets the needs of Alaska. |
| | Rate how closely the activities performed to update and maintain the system match the current Alaska environment. |