APPENDIX G: COMPARISON OF WIC INFORMATION SYSTEMS

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G COMPARISON OF WIC INFORMATION SYSTEMS

G.1 Introduction

G.1.1 Purpose of Document

The Food and Nutrition Service (FNS) contracted with MAXIMUS to gather information about several operational WIC information systems. The goal of this endeavor is to provide WIC State agencies that wish to adopt another State agency's management information system (MIS) with a high-level starting point to develop their feasibility study/alternatives analysis to select the system with the best fit for their WIC environment.

This document is not an exhaustive review of WIC information systems. It presents summary information on four systems selected by FNS. The systems selected for analysis include two of the three State Agency Model (SAM) systems and two additional state-of-the-art systems. More State agency systems may be added at a later date based on resource availability. The systems included in this document are:

- Successful Partners In Reaching Innovative Technology (SPIRIT) State Agency Model (SAM) system
- Mountain Plains State Consortium (MPSC) SAM system[1]
- Michigan MI-WIC system
- Maryland WIC-on-the-Web (WOW) system

This system comparison provides summary information about the planned or existing architecture, functionality, and components of these systems. It does not replace a structured feasibility study/alternatives analysis. The information presented is based on the current implementation of the system in a particular State, thus some features and functions may be specific to a State's implementation choices. Some systems allow functions to be "turned on" or "turned off". This flexibility gives State agencies options (i.e., rules, parameters, settings, equipment compatibility) which should be explored during detailed system analysis.

G.1.2 Methodology

To obtain the information contained in this appendix, MAXIMUS performed the following activities:

[1] At the time of the data collection, the MPSC system was not yet implemented, but was in the testing phase.

- Developed a data collection tool that consisted of the FReD Requirements Traceability Matrix and State agency/ system profile questions.
- Completed a draft version of the data collection from information compiled from system demonstrations and previous requirements traceability analyses.
- Contacted each State agency and conducted interviews with the State and the system contractor.
- Developed an updated data profile for each system and provided it to the State agency and contractor for review and verification.
- Provided the draft appendix to USDA FNS for review and approval

The information contained in this document is current as of January 2009.

G.2 System Profiles

The following sections present summary profile information for each of the selected systems. The information is based on the specific State implementation; therefore, there may be other options available to States considering a system for transfer.

G.2.1 Successful Partners In Reaching Innovative Technology (SPIRIT)

The SPIRIT consortium consists of thirteen (13) State agencies that worked together to develop and implement the first State Agency Model (SAM) information system. SPIRIT is a web-based, smart client information system that includes a mode in which users can check out data to use in areas with little or no internet connectivity.

Below is a screen shot of the SPIRIT main search screen.

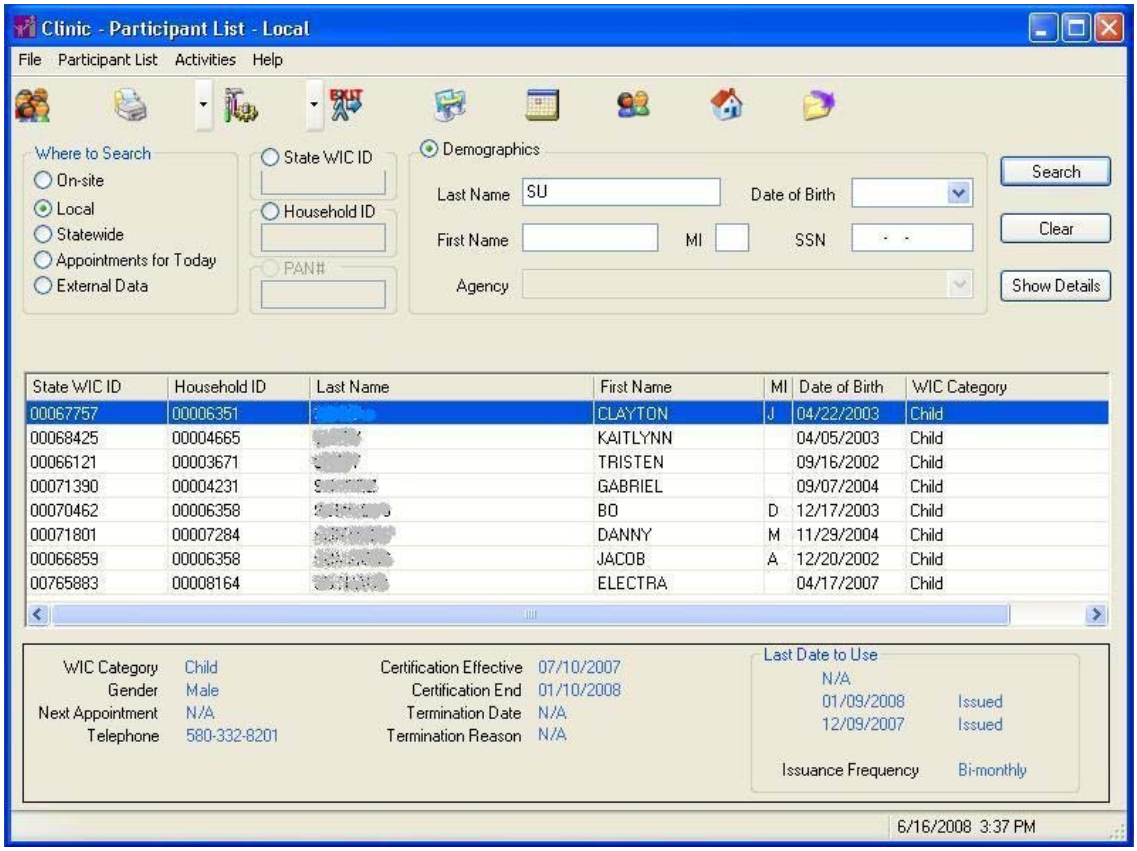

Exhibit 1: SPIRIT Search Screen

The following table provides a profile of the SPIRIT system.

SPIRIT Summary Profile		
State Agency(ies)	Chickasaw Nation (Lead) Members include the following State agencies from Oklahoma and New Mexico: Muscogee Creek Nation, Wichita Caddo Delaware (WCD) Enterprises, Otoe-Missouria, Inter-Tribal Council (ITC) of Oklahoma, Osage Nation and Choctaw Nation from Oklahoma; and Acoma Canoncito & Laguna Hospital (ACL), Zuni Pueblo, Santo Domingo Pueblo, Five Sandoval Pueblos, Eight Northern Pueblos, and San Felipe Pueblo from New Mexico.	
Contact	Melinda Newport melinda.newport@chickasaw.net 580.436.7296	
Caseload and Clinic Environment	Average monthly caseload	Chickasaw Nation: 3,500 The average monthly caseload for the entire SPIRIT consortium is approximately 19,000.
	Local Agencies	0
	Service sites	Permanent: 7[2] Satellite: 0
Contractors	CSC Covansys	
QA/ IV&V Contractor	Burger Carroll, and Associates (BCA)	
Implementation	The system was implemented statewide in the Chickasaw Nation in 2007. The system is complete and transferable.	
EBT	The Chickasaw Nation is actively planning for an online WIC EBT solution.	
Workstation Environment	Operating System	Windows XP
	Presentation Layer	MS Smart Client
	Language	VB.NET Framework 1.1
	Peripherals needed for full functionality	Document printer, MICR printer, signature pad, scanner
	Database Management System	SQL Server Workgroup Edition
	Browser	Not browser dependent
Server Environment	Operating System	Windows 2003
	Language	VB.NET
	Database Management System	SQL Server

[2] The SPIRIT consortium includes 13 state agencies, most with multiple delivery sites.

SPIRIT Summary Profile	
Telecommunications Environment	Recommended bandwidth depends on the number of workstations in the clinic: 3 - 5 users: Dual channel ISDN 112 kbps to 128 kbps Low to mid speed DSL estimated 128 kbps to 384 kbps Low to mid speed cable modem estimated 128 kbps to 384 kbps
	3-7 users: Mid to high speed DSL estimated 384kbps to greater than 1.5 mbps Mid to high speed DSL estimated 384kbps to greater than 2 mbps Fractional T-1 line estimated 384 kbps to 1.5 mbps
	8+ users: High speed DSL estimated greater than 768 kbps High speed cable modem estimated greater than 768 kbps Fractional or full T-1 estimated speed 768kbps to 1.5 mbps
Is this a web-based system that can operate without an internet connection?	Yes
Security/ Authentication	Application security is controlled by a specialized application authentication and authorization model that leverages a database driven user profile and role-based privilege model to control access to various application features. Customized credentials are used to exchange tokenized authentication during service invocations. There is a single sign-on to the application (i.e., the user logs in once to access all modules).

The following diagram represents the technical architecture of the SPIRIT system.

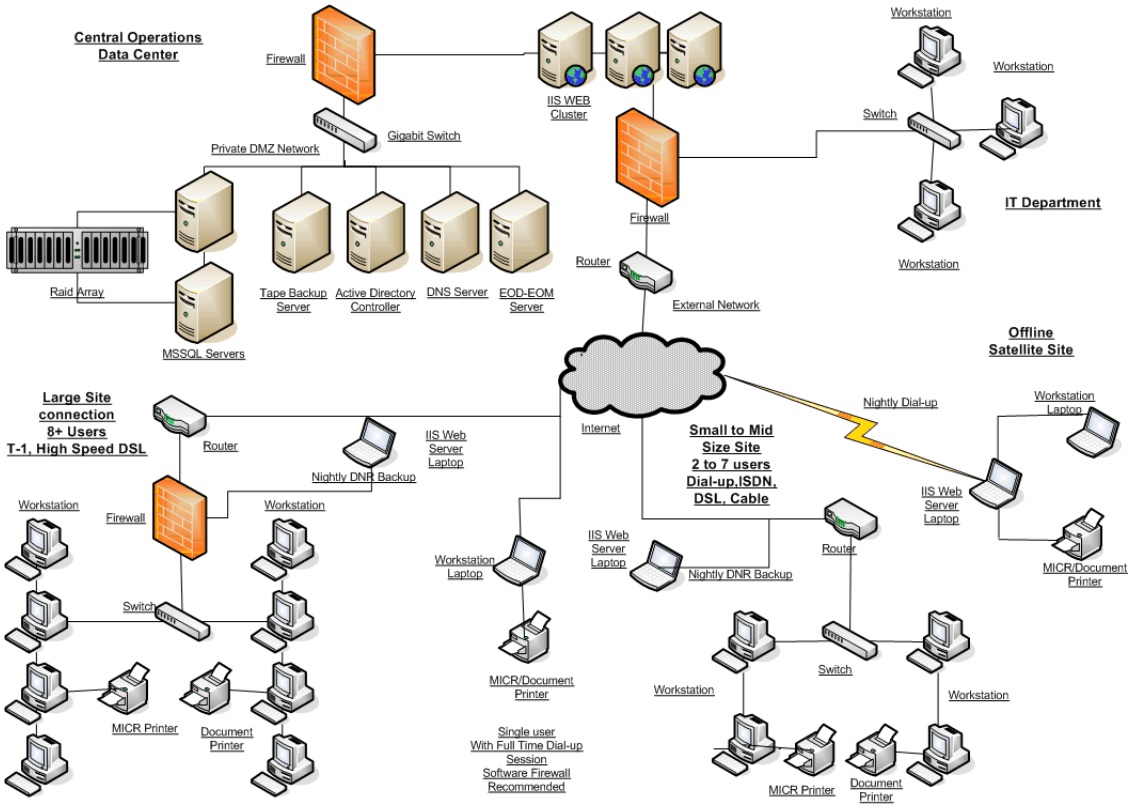

Exhibit 2: SPIRIT Technical Architecture Diagram

Because the SPIRIT system is a SAM system, State agencies selecting this model may (and are sometimes required to) become part of the SPIRIT Users' Group. This group is a forum to manage changes to the system and share resources for change. At the time of this profile, projects to transfer the system have begun in Arkansas, Missouri, Montana, Minnesota, and Maine.

The SPIRIT system is a robust, full featured system. There are several key attributes to understand when considering SPIRIT:

- **Scheduler**. The system allows users to schedule individual participant appointments and group classes. It is flexible to meet various clinic models.
- **Paperless Clinic**. The system supports a paperless clinic. It includes electronic signatures (i.e., the digital capture of written signatures) and scanning capabilities.
- **Online Vendor Component**. SPIRIT includes an on-line vendor application and price tracking module.

- **Breastfeeding Peer Counselor**. The system includes a tracking module for Breastfeeding Peer Counselor Program activities. The module tracks items such as staff contacts and supplies issued.
- **Food Package Flexibility**. Model food packages can be customized to the extent needed at the local level
- **Multiple Benefit Issuance Models**. The system is designed to produce checks (MICR printers with blank check stock), vouchers, and track direct distribution of food benefits. The Chickasaw Nation is currently working on adding an online EBT issuance component.
- **Automated Growth Charts**. The system can plot and produce printable versions of the CDC infant and child growth charts. Prenatal charts can also be automatically plotted and printed.
- **Ad Hoc Reporting - Report Generator**. The system includes an ad hoc reporting tool that users can access to generate a variety of reports. The tool allows for data to be saved to pdf or printed.
- **User Interface**. The user interface is built using tabs to access the screens in a participant folder. A guided script is used to complete certifications.

When asked to share lessons learned from their experience on this project, the Chickasaw Nation provided the following information:

- Seek technical assistance on exactly what to expect from your quality assurance (QA) contractor, especially with regard to user acceptance testing (UAT). The on-site demands for this process are massive. Do not yield to any pressure to shorten UAT testing because it takes a lot of time. The more conscientious the testing effort, the more complete your final system will be.
- Prepare staff and all stakeholders involved very thoroughly with pre-implementation planning.
- Plan for one or two years of continued service in your maintenance and operations contract, if you plan to have one, following rollout without changing contractors. Consider how you would write a Request for Proposals (RFP) for maintenance and operations to support a system you have yet to experience live.

G.2.2 Mountain Plains States Consortium (MPSC)

The Mountain Plains States Consortium (MPSC) consists of three (3) State agencies that worked together to develop and implement the second SAM information system. MPSC is a web-based, smart client information system that includes a mode in which users can check out data to use in areas with little or no internet connectivity. In addition, this function can be used as a disaster recovery mechanism; sites that lose connectivity can unlock a local copy of their database to continue processing in a disconnected mode.

Below is a screen shot of the MPSC main search screen.

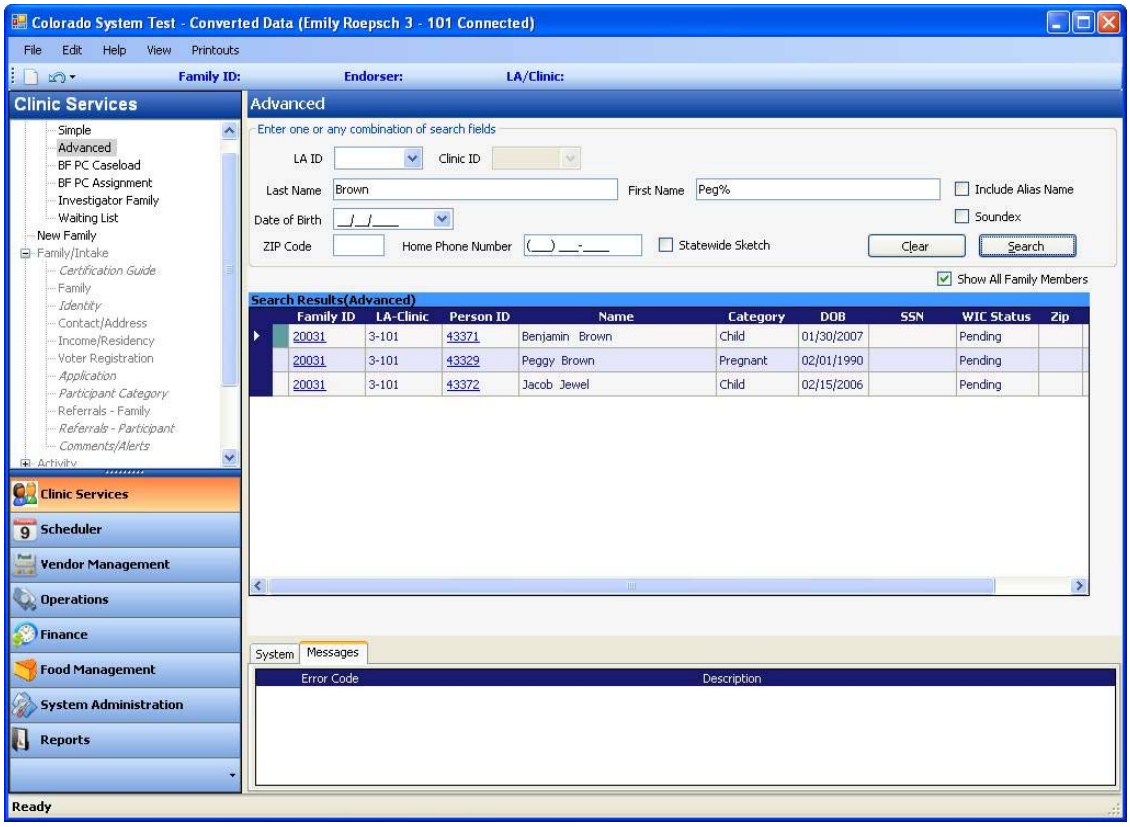

Exhibit 3: MPSC Search Screen

The following table provides a profile of the MPSC system.

MPSC Summary Profile		
State Agency(ies)	Colorado (Lead) Member States include Utah and Wyoming.	
Contact	Steven Sprague Steven.Sprague@state.co.us 303.692.2336	
Caseload and Clinic Environment	Average monthly caseload	Colorado: 105,000 The average monthly caseload for the entire MPSC consortium is approximately 187,000.
	Local Agencies	Colorado: 39
	Service sites	Permanent: 76 Satellite: 31
Contractors	CIBER	
QA/ IV&V Contractor	Burger Carroll, and Associates (BCA)	
Implementation	The system is expected to pilot in winter 2009-2010, implemented spring 2010.	
EBT	The MPSC system will deploy with offline EBT benefit issuance capabilities for the State of Wyoming.	
Workstation Environment	Operating System	Windows XP
	Presentation Layer	MS Smart Client using Windows Forms
	Language	VB.NET (.NET framework 3.0)
	Peripherals needed for full functionality	Document printer, MICR printer (paper only), smart card reader (EBT only), signature pad, scanner
	Database Management System	SQL Server Express 2005
	Browser	Not browser dependent
Server Environment	Operating System	Windows Server 2003
	Language	VB.NET (.NET framework 3.0)
	Database Management System	SQL Server 2005

MPSC Summary Profile	
Telecommunications Environment	Recommended bandwidth depends on the number of workstations in the clinic: 1: 256 Kbps 2-5: 750 Kbps 6 or more: 1500 Kbps
Is this a web-based system that can operate without an internet connection?	Yes
Security/ Authentication	There are two types of security to consider in the MPSC system: ▪ The first is application-only. Security includes a user ID and password controlled by the application. The password is stored encrypted in the database. ▪ The second uses an API to authenticate a user through Active Directory, for those states that use Active Directory for their WIC staff. No password is stored in the MPSC system database at all (except for disconnected clinics).

The following diagram represents the technical architecture of the MPSC system.

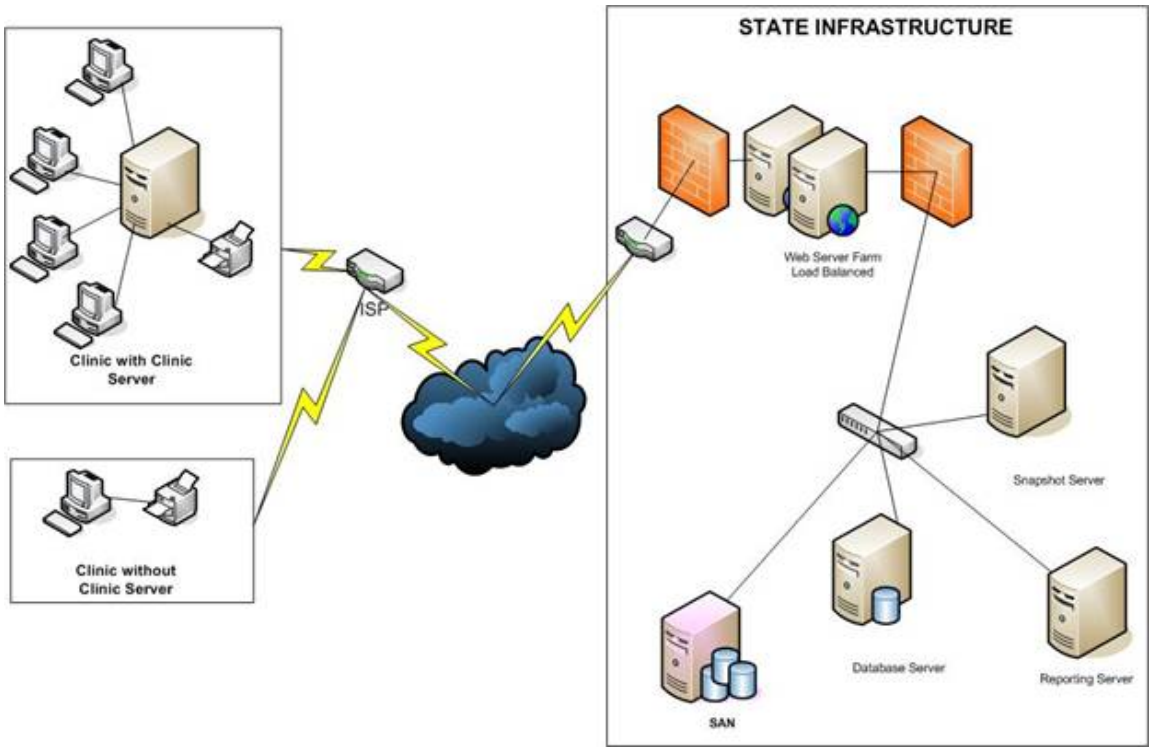

Exhibit 4: MPSC Technical Architecture Diagram

Because the MPSC system is a SAM system, State agencies selecting this model may have the opportunity to join the Mountain Plains States in a MPSC Users' Group in the future.

The MPSC system is a robust, full featured system. There are several key attributes to understand when considering MPSC:

- **Scheduler**. The system allows users to schedule family-based participant appointments and group classes. It is flexible to meet various clinic models. Users can search for available appointments based on preferences. The daily schedule has a visual notification if an appointment is marked kept.
- **Paperless Clinic**. The system supports a paperless clinic. It includes electronic signatures (i.e., the digital capture of written signatures) and scanning capabilities.
- **Food Package Flexibility**. Model food packages can be customized to the extent needed at the local level.
- **Multiple Benefit Issuance Models**. The system is designed to produce checks and, for Wyoming, offline EBT. The system supports benefit issuance by rolling or calendar month, and supports prorating.
- **Automated Growth Charts**. The system can plot and produce on-screen and printable versions of the CDC prenatal, infant, and child growth charts. The growth chart area includes links to external websites where additional charts (CDC special needs, Down's Syndrome, premature) can be accessed.
- **Nutrition Interviews**. Nutrition interviews are designed to support VENA concepts, including customizable conversation starters/ prompts
- **798 Report**. The 798 Report, which has been updated by MPSC to include additional features, is integrated into the system. The system feeds the 798 spreadsheet through an automated interface.
- **Tab-based Messaging**. Alerts and messages to users are managed through an information bar at the bottom of the screen, which virtually eliminates the need to use pop-up messages.
- **Time Studies**. The system supports time studies.
- **User Communications**. The system contains both a real-time broadcast capability from the state office to all on-line users and a messaging capability where authorized users can post informational messages to other system users (e.g., notification of extra formula at a local agency).
- **User Interface**. The user interface is built using a navigation tree to access screens. Record selectors are used to spin through historical data

maintained in the system. Screens can also be accessed through file menus.

When asked to share lessons learned from their experience on this project, the MPSC DDI Contractor provided the following information:

- Conducting a paradigm review (in which gaps between the old and new systems are reviewed) is a critical part of the process. If any design changes are expected (rather than a straight transfer), the project needs to plan significant time to conduct this review.

G.2.3 Michigan MI-WIC

The Michigan MI-WIC system is browser-based; the application does not reside on the workstation. The MI-WIC system is a transfer of the Maryland system, but has had significant modifications (see attributes below).

Below is a screen shot of the Michigan main search screen.

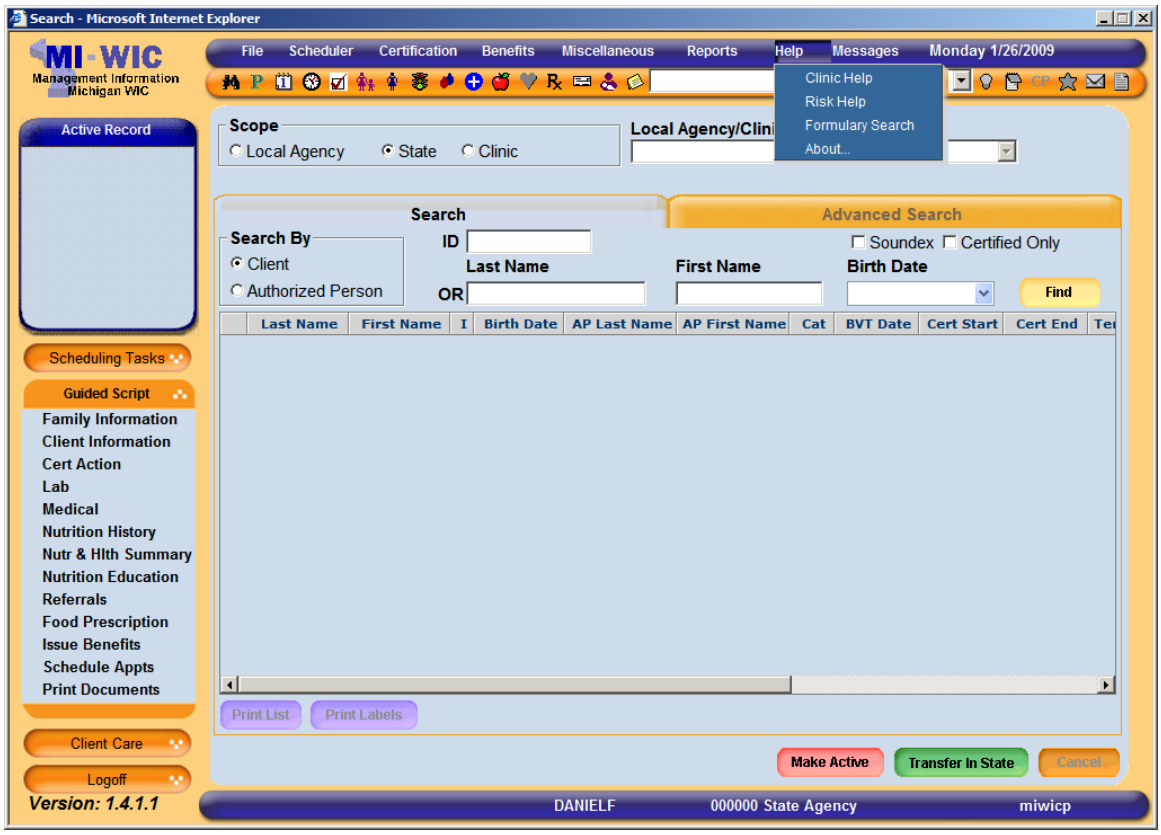

Exhibit 5: Michigan Search Screen

The following table provides a profile of the Michigan system.

Michigan Summary Profile		
State Agency	Michigan	
Contact	Stan Bien biens@michigan.gov 517-335-8448.	
Caseload and Clinic Environment	Average monthly caseload	240,000
	Local Agencies	49
	Service sites	Permanent sites: 190 Satellite sites: 35 (approximately) There are 225 clinics in the State of Michigan.
Contractors	Three Sigma	
QA/ IV&V Contractor	MAXIMUS	
Implementation	The system was implemented statewide in Michigan in 2009. The system is complete and transferable.	
EBT	The MI-WIC system only produces benefits using online EBT.	
Workstation Environment	Operating System	Any (Windows, unix)
	Presentation Layer	NA
	Language	NA
	Peripherals needed for full functionality	Document printer, signature pad, scanner
	Database Management System	No DBMS on workstation
	Browser	Internet Explorer 5.5 or higher
Server Environment	Operating System	Application Server: Windows 2003 Report Server: Windows 2003 Database Server: Solaris
	Language	ASP.NET, VB.NET, java script (both)
	Database Management System	Oracle 10g

Michigan Summary Profile	
Telecommunications Environment	The State recommends a reliable broadband Internet connection. The system uses CISCO web accelerator that compresses all page sizes to less to 56K. The average size of a page is 30-35 KB. The system will work with a dial-up connection. A combination of following is used by the local agencies • T1 or shared T1 • 6600 KB downstream with 768 KB upstream Comcast cable service • 1.5 MB downstream with 256 KB upstream – Charter cable service • 384 KB – 1.5 MB downstream with 128 KB – 384 KB upstream – AT&T DSL • Sprint and Verizon Broadband wireless cards
Is this a web-based system that can operate without an internet connection?	No. Michigan is a leader in broadband access; therefore the State does not have a need for user access without telecommunications. Users have broadband wireless cards that are used to access the Internet from remote locations.
Security/ Authentication	The State has a single sign-on (SSO) requirement. Users sign in to a single location to access multiple State systems, including MI-WIC.

The following diagram represents the technical architecture of the Michigan system.

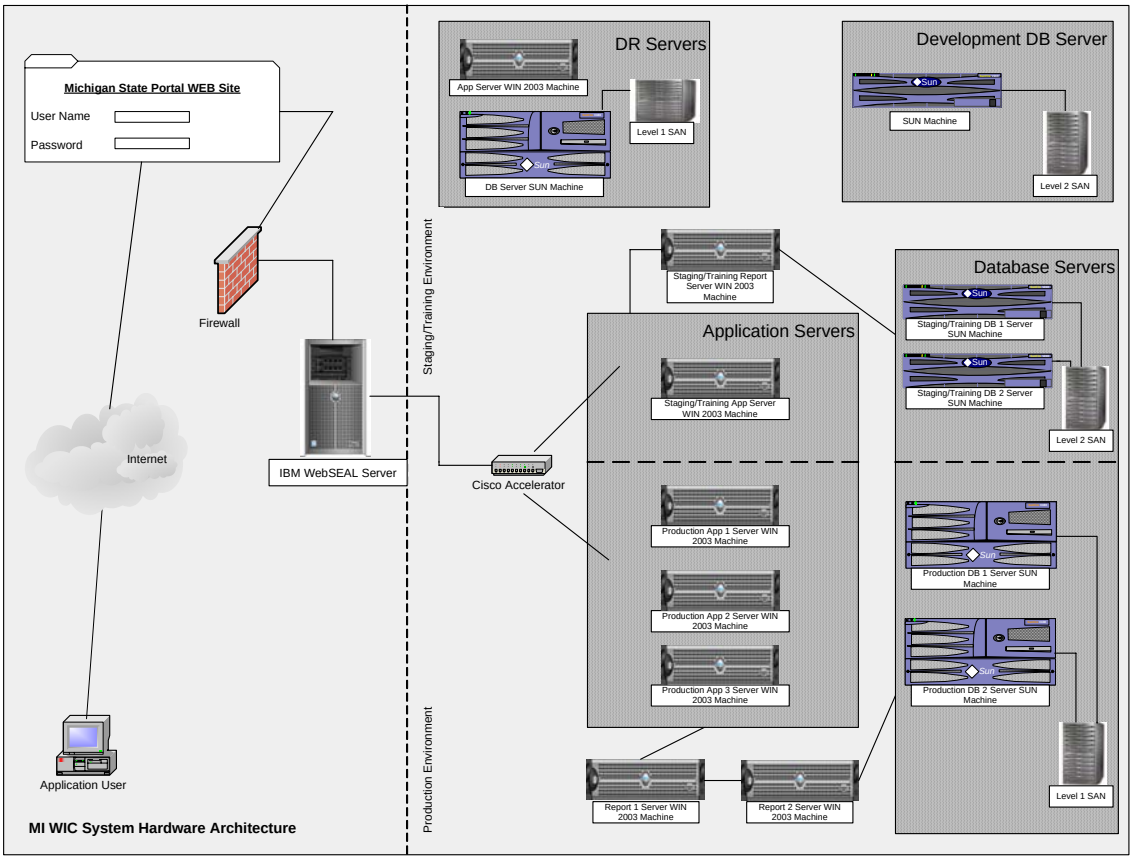

Exhibit 6: Michigan Technical Architecture Diagram

The MI-WIC system is a robust, full featured system. There are several key attributes to understand when considering MI-WIC:

- **Scheduler**. The system allows users to schedule family-based participant appointments and group classes. It is flexible to meet various clinic models. Users can search for available appointments based on preferences. The daily schedule has a visual notification (color change) if an appointment is marked kept. It also includes appointment functions such as waiting list, early appointment reminders, and 10/20 day appointment scheduling reminders.

- **Paperless Clinic**. The system supports a paperless clinic. It includes electronic signatures (i.e., the digital capture of written signatures) and scanning capabilities.

- **Food Package Flexibility**. Model food packages can be customized to the extent needed at the local level.

- **Automated Growth Charts**. The system can plot and produce printable versions of the CDC prenatal, infant, and child growth charts.

It can also plot and produce World Health Organization (WHO) and very low birth weight charts.

- **Vendor Module**. The system includes an online vendor price survey component. It also includes a geographic information system mapping function that supports the State's vendor limiting requirement.
- **Formula Management**. The system includes a Class III formula approval queue that allows State and local level approvers to access the records that need approval. It also includes a detailed, searchable formulary function.
- **Communications Message Board**. The system includes a communications message board that can be used to post messages to users or subsets of users of the system.
- **Onsite List**. The system includes an onsite list that tracks when participants arrive in the clinic, when they complete each step in the appointment process, and when they are done. Michigan added a queue view that displays participants by waiting times.
- **Interfaces**. The system includes several interfaces, such as an interface to wichealth.org (web-based nutrition education), food stamp program, Medicaid, MCIR (Michigan Care Improvement Registry), Licensing 2000 (to validate retailer license), Maternal-Infant Health Program (MIHP), and Focus:HOPE (for commodity supplemental food (CSFP) dual participation).
- **Nutrition Education**. Nutrition education stage of change, goals, objectives, and interventions are tracked. Nutrition Education completed online at www.wichealth.org is automatically tracked to the client record in MI-WIC.
- **Time Studies.** The system supports time studies.
- **User Interface**. The user interface is built to minimize scrolling. Screens can be accessed through file menus, icons, a sidebar menu, or using a guided script.

When asked to share lessons learned from their experience on this project, the State of Michigan and its DDI contractor provided the following information:

- Projects need to have State "boot camp" training on the transfer system early on so that staff understand how the transfer system works and how changes impact the whole system. The project would have been smoother if the State had known more details about the transfer system in the beginning.
- The project used an iterative development process that worked very well. Changes were slowly implemented with staff continually

reviewing the system to refine the end product. This kept interest alive, but required significant resources.

- Make sure that all of the players work together as an integrated team. This project had a team of State employees from various areas and several contractors that worked well together for the good of the project.
- State staff time needs to be used well. Plan meetings and agendas to maximize their time and make every contact for the project worthwhile.
- Make sure to keep local-level end users included in the project. Michigan held several onsite demonstrations in various regions of the State to allow local staff to see what was coming, ask questions, and provide high-level input. This helped to achieve statewide buy-in for the new system. The State also had a group of local agency coordinators representing various agency set up, regions and caseload who validated the system design and implementation at planned intervals to ensure that the developed system worked for all.
- Prior to just-in-time implementation training, local staff were required to complete a CD-based training module to gain some basic background information about the system.

G.2.4 Maryland WOW

The Maryland WIC-on-the-Web (WOW) system is browser-based; the application does not reside on the workstation.

Below is a screen shot of the Maryland main search screen.

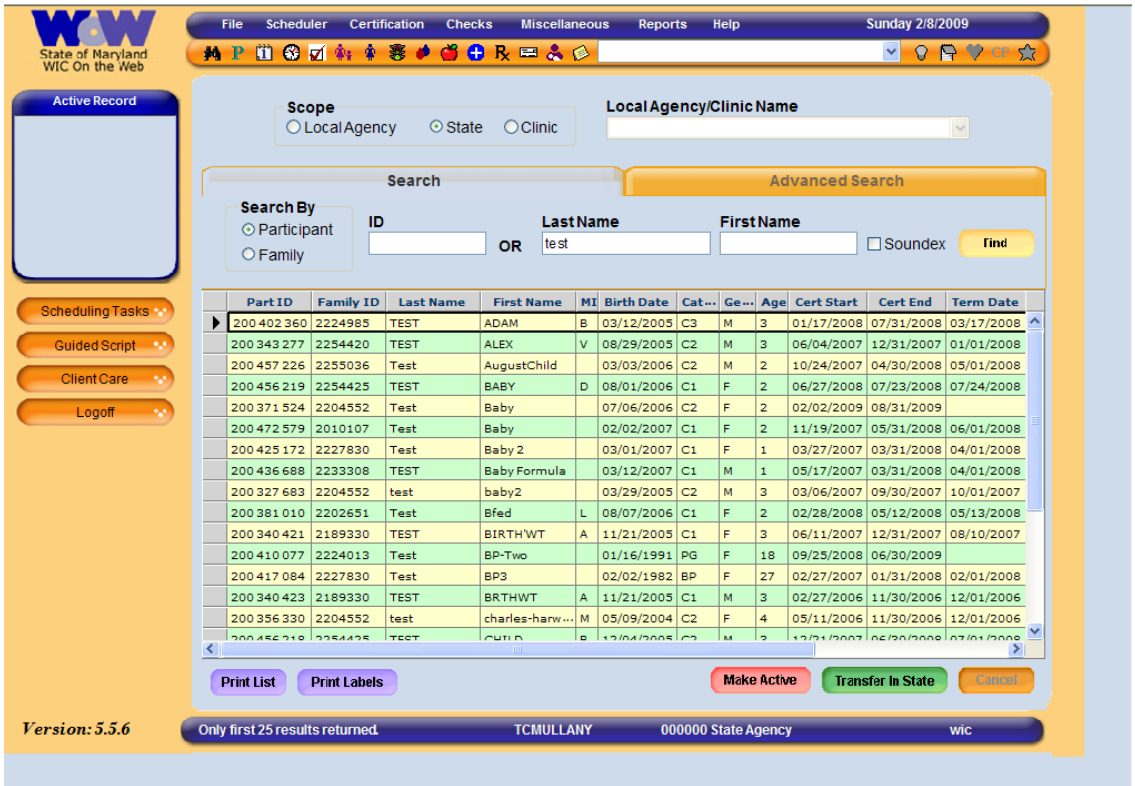

Exhibit 7: Maryland Search Screen

The following table provides a profile of the Maryland system.

Maryland Summary Profile		
State Agency	Maryland	
Contact	Deborah Morgan morgand@dhmh.state.md.us 410.767.5658	
Caseload and Clinic Environment	Average monthly caseload	144,000
	Local Agencies	18
	Service sites	Permanent sites: 89 Satellite sites: 2
Contractor	Three Sigma	

Maryland Summary Profile		
QA/ IV&V Contractor	None	
Implementation	The system was implemented statewide in Maryland in 2004. The system is complete and transferable.	
EBT	The State is preparing the system for EBT, but there are no immediate WIC EBT projects planned.	
Workstation Environment	Operating System	Any (Windows, unix)
	Presentation Layer	NA
	Language	NA
	Peripherals needed for full functionality	Document printer, MICR printer, signature pad, scanner
	Database Management System	No DBMS on workstation
	Browser	Internet Explorer 5.5 or higher
Server Environment	Operating System	Application Server: Windows 2003 Report Server: Windows 2003 Database Server: Solaris
	Language	ASP.NET, VB.NET, java script
	Database Management System	Oracle 10g
Telecommunications Environment	WOW Screens were designed to be less then 30 K. Consequently users can expect an approx. 5 second over a 56kbps line response and an approx. 1 sec response time on 256kbps connection and above.	
Is this a web-based system that can operate without an internet connection?	No.	
Security/ Authentication	The WOW system uses a multilayered security architecture that begins at the agency's firewall. All network traffic passes through a Juniper Web I/O accelerator which rewrites every packet to ensure that no malformed packets are passed on to the web server. The I/O accelerator compresses and encrypts all application traffic to minimize risk and improve application performance. The system will use either NTLM or Kerberos depending on the setup of the client's browser.	

The following diagram represents the technical architecture of the Maryland system.

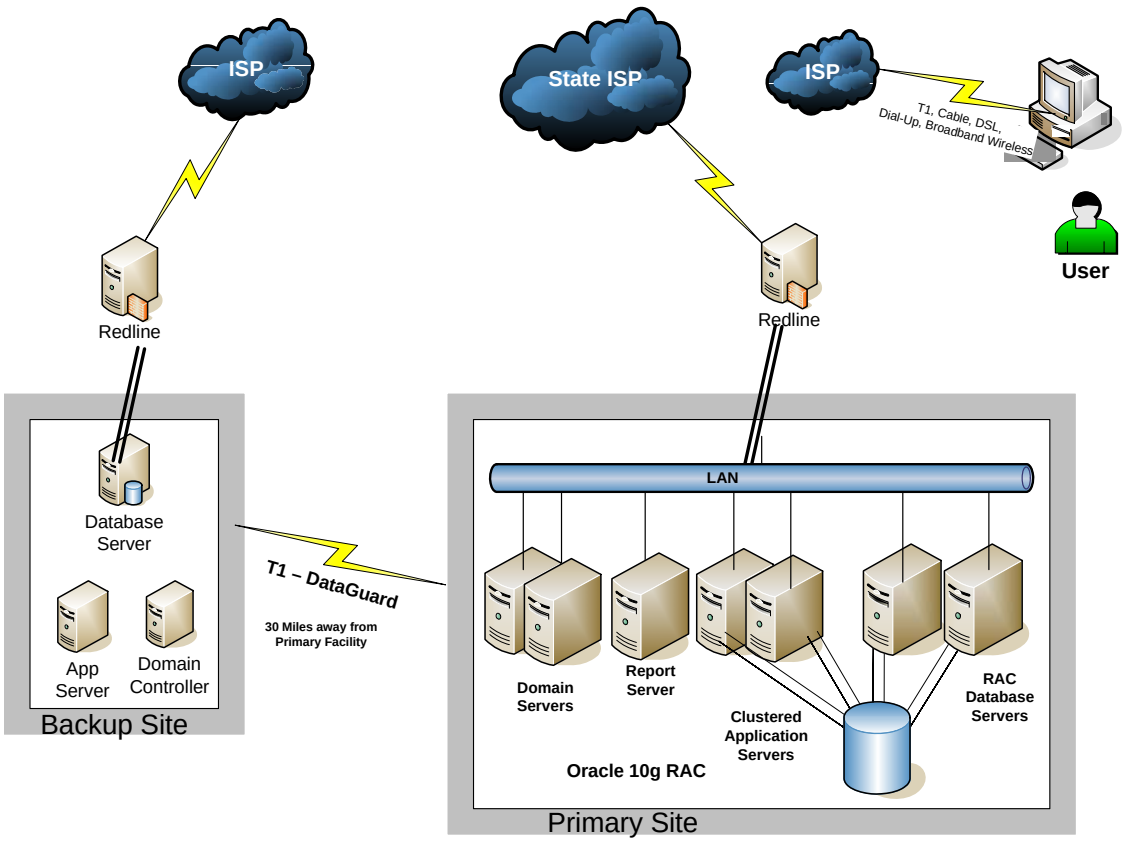

Exhibit 8: Maryland Technical Architecture Diagram

The WOW system is a robust, full featured system. There are several key attributes to understand when considering WOW:

- **Scheduler**. The system allows users to schedule family-based participant appointments and group classes. It is flexible to meet various clinic models. Users can search for available appointments based on preferences. The daily schedule has a visual notification (color change) if an appointment is marked kept.
- **Automated Growth Charts**. The system can plot and produce printable versions of the CDC prenatal, infant, and child growth charts. Growth charts adjust for prematurity.
- **Household Summary Screen/ Active Record Box.** At-a-glance information on all family members and what services are needed.
- **Navigation**. Records are accessible for all family members from any screen through the use of toggling.
- **Onsite List**. The system includes an onsite list that tracks when participants arrive in the clinic, when they complete each step in the appointment process, and when they are done.

- **User Interface**. The user interface is built to minimize scrolling. Screens can be accessed through file menus, icons, a sidebar menu, or using a guided script. There is a user friendly feel throughout the system and extensive use of informational pop-ups.

When asked to share lessons learned from their experience on this project, the State of Maryland and its contractor provided the following information:

- It is critical to have users involved at the start of design through implementation.
- You can never perform enough testing: have users involved in testing as much as possible because they always come up with a different way of doing things.
- There will always be changes to the system (new rules, regulations, tweaks). It is important to realize that once the system is implemented it is never really done.

G.2.5 System Profile Comparison

	SPIRIT Summary Profile	MPSC Summary Profile	Michigan Summary Profile	Maryland Summary Profile
State Agency(ies)	Chickasaw Nation (Lead)	Colorado (Lead)	Michigan	Maryland
Contact	Melinda Newport	Steven Sprague	Stan Bien	Deborah Morgan
	melinda.newport@chickasaw.net	Steven.Sprague@state.co.us	biens@michigan.gov	morgand@dhmh.state.md.us
	580.436.7296	303.692.2336	517.335.8448	410.767.5658
Caseload and Clinic Environment				
Average monthly caseload	Chickasaw Nation: 3500 The average monthly caseload for the entire SPIRIT consortium is approximately 19,000.	Colorado: 105,000	240,000	144,000
Local Agencies	0	Colorado: 39	49	18
Service sites	Permanent: 7 Satellite: 0	Permanent: 76 Satellite: 31	Permanent: 190 Satellite: 35	Permanent: 89 Satellite: 2
Contractors	CSC Covansys	CIBER	Three Sigma	Three Sigma
QA/ IV&V Contractor	Burger Carroll, and Associates (BCA)	Burger Carroll, and Associates (BCA)	MAXIMUS	None
Implementation	The system was implemented statewide in the Chickasaw Nation in 2007. The system is complete and transferable.	The system is expected to pilot in winter 2009-2010, implemented spring 2010.	The system was implemented statewide in Michigan in 2009. The system is complete and transferable.	The system was implemented statewide in Maryland in 2004. The system is complete and transferable.
EBT	The Chickasaw Nation is actively planning for an online WIC EBT solution.	The MPSC system will deploy with offline EBT benefit issuance capabilities for the State of Wyoming.	The MI-WIC system only produces benefits using online EBT.	The State is preparing the system for EBT, but there are no immediate WIC EBT projects planned.

	SPIRIT Summary Profile	MPSC Summary Profile	Michigan Summary Profile	Maryland Summary Profile
Workstation Environment				
Operating System	Windows XP	Windows XP	Any (Windows, unix)	Any (Windows, unix)
Presentation Layer	MS Smart Client	MS Smart Client using Windows Forms	NA	NA
Language	VB.NET Framework 1.1	VB.NET (.NET framework 3.0)	NA	NA
Peripherals needed for full functionality	Document printer, MICR printer, signature pad, scanner	Document printer, MICR printer (paper only), smart card reader (EBT only), signature pad, scanner	Document printer, signature pad, scanner	Document printer, MICR printer, signature pad, scanner
Database Management System (DBMS)	SQL Server Workgroup Edition	SQL Server Express 2005	No DBMS on workstation	No DBMS on workstation
Browser	Not browser dependent	Not browser dependent	Internet Explorer 5.5 or higher	Internet Explorer 5.5 or higher
Server Environment				
Operating System	Windows 2003	Windows Server 2003	Application Server: Windows 2003 Report Server: Windows 2003 Database Server: Solaris	Application Server: Windows 2003 Report Server: Windows 2003 Database Server: Solaris
Language	VB.NET	VB.NET (.NET framework 3.0)	ASP.NET, VB.NET, java script (both)	ASP.NET, VB.NET, java script
DBMS	SQL Server	SQL Server 2005	Oracle 10g	Oracle 10g

	SPIRIT Summary Profile	MPSC Summary Profile	Michigan Summary Profile	Maryland Summary Profile
Telecommunications Environment	Recommended bandwidth depends on the number of workstations in the clinic: • **3** - 5 users: Dual channel ISDN 112 kbps to 128 kbps, Low to mid speed cable modem estimated 128 kbps to 384 kbps • 3-7 users: Mid to high speed DSL estimated 384kbps to greater than 1.5 mbps, Mid to high speed DSL estimated 384kbps to greater than 2 mbps, Low to mid speed DSL estimated 128 kbps to 384 kbps, Fractional T-1 line estimated 384 kbps to 1.5 mbps • 8+ users: High speed DSL estimated greater than 768 kbps, High speed cable modem estimated greater than 768 kbps, Fractional or full T-1 estimated speed 768kbps to 1.5 mbps	Recommended bandwidth depends on the number of workstations in the clinic: • 1: 256 Kbps • 2-5: 750 Kbps • 6 or more: 1500 Kbps	The State recommends a reliable broadband Internet connection. The system uses CISCO web accelerator that compresses all page sizes to less to 56K. The average size of a page is 30-35 KB. The system will work with a dial-up connection. A combination of following is used by the local agencies • 1.5 MB downstream with 256 KB upstream – Charter cable service • 384 KB – 1.5 MB downstream with 128 KB – 384 KB upstream – AT&T DSL • T1 or shared T1 • 6600 KB downstream with 768 KB upstream Comcast cable service • Sprint and Verizon Broadband wireless cards	WOW Screens were designed to be less then 30 K. Consequently users can expect an approx. 5 second over a 56kbps line response and an approx. 1 sec response time on 256kbps connection and above.

	SPIRIT Summary Profile	MPSC Summary Profile	Michigan Summary Profile	Maryland Summary Profile
Is this a web-based system that can operate without an internet connection?	Yes	Yes	No. Michigan is a leader in broadband access, therefore the State does not have a need for user access without telecommunications. Users have broadband wireless cards that are used to access the Internet from remote locations.	No.
Security/ Authentication	Application security is controlled by a specialized application authentication and authorization model that leverages a database driven user profile and role-based privilege model to control access to various application features. Customized credentials are used to exchange tokenized authentication during service invocations. There is a single sign-on to the application (i.e., the user logs in once to access all modules).	There are two types of security to consider in the MPSC system:The first is application-only. Security includes a user ID and password controlled by the application. The password is stored encrypted in the database.The second uses an API to authenticate a user through Active Directory, for those states that use Active Directory for their WIC staff. No password is stored in the MPSC system database at all (except for disconnected clinics).	The State has a single sign-on (SSO) requirement. Users sign in to a single location to access multiple State systems, including MI-WIC.	The WOW system uses a multilayered security architecture that begins at the agency's firewall. All network traffic passes through a Juniper Web I/O accelerator which rewrites every packet to ensure that no malformed packets are passed on to the web server. The I/O accelerator compresses and encrypts all application traffic to minimize risk and improve application performance. The system will use either NTLM or Kerberos depending on the setup of the client's browser.

G.3 System Functional Comparison

The following pages contain the FReD Requirements Traceability Matrix (RTM) completed for each of the selected systems. For each function, one of the responses below has been indicated in the "*Does the System Perform this Function?*" column:

- **Yes**. The system performs this function in its current implementation.
- **No**. The system does not perform this function in its current implementation.
- **Partially**. The system performs some of this function in its current implementation.
- **Future Enhancement**. The system does not perform this function in its current implementation, but planning has taken place to add this function.
- **Performed by External System**. The system does not perform this function in its current implementation, but it is performed by another system, such as a banking contractor.

The column "*Current State Implementation Notes*" contains details about how the system performs the function, or unique attributes to the system related to the function, as applicable.

		SPIRIT SAM Consortium		Mountain Plains States Consortium (MPSC)		Michigan MI-WIC		Maryland WOW	
#	Requirement	Does the System Perform this Function?	Current State Implementation Notes	Does the System Perform this Function?	Current State Implementation Notes	Does the System Perform this Function?	Current State Implementation Notes	Does the System Perform this Function?	Current State Implementation Notes
3.1	**Certification**								
3.1.1	*Create and Locate Data Records*								
3.1.1.1	Create New Applicant Record	Yes	Demographics can be copied from one family member's record to another. Using the ZIP+4 field populates the City and County.	Yes	Using the ZIP field populates the City, State, and County.	Yes	New applicant records are created through a Precertification (precert) screen that captures basic information used to schedule an initial appointment. Using the ZIP field populates the City, State, and County.	Yes	New applicant records are created through a Precertification (precert) screen that captures basic information used to schedule an initial appointment. Using the ZIP field populates the City, State, and County.
3.1.1.2	Search for Applicant/ Participant Record	Yes		Yes		Yes	Search capabilities include basic search parameters, such as name and phone number, as well as EBT card number. Users can swipe the EBT card through a mag stripe reader to populate the card number into the advanced search EBT card field to run the search.	Yes	
3.1.2	*Manage Application Process*								
3.1.2.1	Maintain Basic Information on Applicant/ Participant	Yes		Yes		Yes		Yes	
3.1.2.2	Screen Applicant for Prior Enrollment	Yes		Yes	System performs an on-demand dual enrollment match, as well as a more comprehensive backend dual enrollment match that must be resolved by staff.	Yes	System performs an on-demand dual enrollment match, as well as a more comprehensive backend dual enrollment match that must be resolved by staff. Enrollment in CSFP is also checked and resolved through the system.	Yes	System performs an on-demand dual enrollment match, as well as a more comprehensive backend dual enrollment match that must be resolved by staff.
3.1.2.3	Determine Adjunct or Automatic Income Eligibility	Yes		Yes		Yes	Interfaces have been designed to verify enrollment in adjunct programs, including FSP and Medicaid (CHAMPS).	Yes	
3.1.2.4	Determine Documented Income Eligibility	Yes		Yes		Yes	The system can perform year-to-date income calculations, as well as capturing data from a variety of income periods to calculate a total income amount.	Yes	
3.1.2.5	Maintain Waiting List	Yes		Yes		Yes	The MI-WIC system has an appointment waiting list feature that allows clinics to set up waiting lists in case insufficient appointment slots are available.	Yes	
3.1.3	*Determine Nutrition Risk of Applicant*								
3.1.3.1	Maintain Applicant Nutrition and Health Characteristics	Yes	The nutrition assessment feature uses VENA-compliant questions.	Yes	The nutrition assessment feature uses VENA-compliant questions and tracks goals.	Yes	The nutrition assessment feature uses VENA-compliant questions and tracks goals and stage of change.	Yes	The nutrition assessment feature uses VENA-compliant questions.
3.1.3.2	Calculate Body Mass Index and Produce Automated Growth Chart	Yes	The SPIRIT system uses the CDC growth grids for all infant and children growth grids. The Prenatal Weight Gain Grid was adapted from North Carolina.	Yes	Automated CDC growth charts for pregnant women, infants, and children are included. Links to external websites where additional charts (CDC special needs, Down's Syndrome, premature) can be accessed are included.	Yes	Automated CDC growth charts for pregnant women, infants, and children are included. The system also includes very low birth weight and World Health Organization (WHO) growth charts.	Yes	Automated CDC growth charts for pregnant women, infants, and children are included.
3.1.3.3	Capture and Document Blood Test Results	Yes		Yes		Yes		Yes	
3.1.3.4	Determine Nutrition Risk and Calculate Priority	Yes	Risks are automatically and manually assigned.	Yes	Risks are automatically and manually assigned.	Yes	Risks are automatically and manually assigned. For automatically assigned risks, reasons for assignment are provided.	Yes	Risks are automatically and manually assigned. For automatically assigned risks, reasons for assignment are provided.
3.1.4	*Complete Certification*								
3.1.4.1	Assess Applicant for Temporary Certification/	Yes	One month of benefits can be issued	Yes	One month of benefits can be issued	Yes	One month of benefits can be issued	Yes	One month of benefits can be issued
3.1.4.2	Certify Applicant	Yes		Yes		Yes		Yes	
3.1.4.3	Maintain Proxy Information	Yes	Two alternative representatives can be identified.	Yes	Two proxies can be identified.	Yes	Two proxies can be identified.	Yes	Two proxies can be identified.
3.1.4.4	Issue Identification Card	No		No		No	The EBT card is the ID card. Participants do not use a separate ID to purchase foods at authorized grocers/ retailers.	No	

		SPIRIT SAM Consortium		Mountain Plains States Consortium (MPSC)		Michigan MI-WIC		Maryland WOW	
#	Requirement	Does the System Perform this Function?	Current State Implementation Notes	Does the System Perform this Function?	Current State Implementation Notes	Does the System Perform this Function?	Current State Implementation Notes	Does the System Perform this Function?	Current State Implementation Notes
3.1.5	*Prescribe Food Package*								
3.1.5.1	Select and Tailor Food Prescription	Yes		Yes		Yes	The system enforces FNS maximum food amount values. It includes a function to calculate the dairy exchange (i.e., amount of milk and corresponding amount of cheese that can be prescribed to stay within maximum allowed amounts.	Partially	Model food packages cannot be tailored. The State has defined a significant number of model packages to accommodate most tailoring needs.
3.1.5.2	Change Food Prescription	Yes		Yes		Yes		Yes	
3.1.6	*Process Participant Changes and Transfers*								
3.1.6.1	Change Family/Household Grouping	Yes		Yes		Yes		Yes	
3.1.6.2	Change Participation Status and/or Category	Yes		Yes		Yes		Yes	
3.1.6.3	Process In-State Transfers and Produce VOC	Yes		Yes		Yes		Yes	
3.1.6.4	Process Out of State Transfers and Produce VOC	Yes		Yes		Yes		Yes	
3.2	**Nutrition Education, Health Surveillance, and Referrals**								
3.2.1	*Maintain Nutrition Education Data*								
3.2.1.1	Create Participant Care Plan	Yes		Yes		Yes		Yes	
3.2.1.2	Track Nutrition Education Contacts and Topics Covered	Yes	Nutrition goals are tracked.	Yes	Nutrition goals are tracked.	Yes	Recommended individual and family nutrition education topics are highlighted based on risk codes assigned. Stage of change is tracked for nutrition goals.	Yes	
3.2.2	*Perform Participant Referrals*								
3.2.2.1	Track Incoming and Outgoing Referrals	Yes		Yes		Yes	Recommended individual and family referrals are highlighted based on risk codes assigned.	Yes	
3.2.3	*Provide Voter Registration Information*								
3.2.3.1	Provide Voter Registration Information	Yes	This is tailored to each State agency that operates the SPIRIT system.	Yes		Yes		Yes	
3.2.4	*Determine Immunization Status*								
3.2.4.1	Screen and Refer Participant for Immunization Services	Yes		Yes		Yes	The system interfaces with MCIR (Michigan Care Improvement Registry) system maintained by the MDCH, Davison of Immunization.	Yes	
3.3	**Food Management**								
3.3.1	*Maintain Food Categories/Subcategories*								
3.3.1.1	Maintain Food Category/ Subcategory Table	Future Enhancement		Yes		Yes		Yes	Maryland has incorporated the national cat/ subcat model in preparation for EBT.
3.3.2	*Maintain Foods and Food Package Information*								
3.3.2.1	Establish and Maintain Approved Foods	Yes		Yes		Yes		Yes	
3.3.2.2	Set up and Maintain Food Package Data	Yes		Yes		Yes	Food package and risk integrity is performed for certain risks to alert users if an inappropriate food package is being assigned. For example, if a participant has a risk for lactose intolerance, the user will receive an alert if assigning a food package that does not accommodate this risk.	Yes	
3.3.2.3	Determine Food Package Proration Schedule	Yes	Proration is defined by fourths of the month.	Yes	Proration is defined by thirds of the month.	Yes	Proration occurs at the category/ subcategory level.	Yes	Proration occurs at the category/ subcategory level.
3.3.3	*Maintain Food Instrument Data*								
3.3.3.1	Record Food Instrument Types	Yes		Yes		Yes	The system records the FI Types for Farmer's Market coupons, but not for WIC food benefits.	Yes	
3.3.3.2	Establish Food Instrument Maximum Allowed Amounts	Yes		Yes		No	Not applicable in EBT.	Yes	
3.3.4	*Maintain UPC Database and Food Item Maximum Allowed Amounts*								
3.3.4.1	Maintain UPC Database for WIC Authorized Foods	Yes		Yes		Yes		Yes	
3.3.4.2	Establish Food Item Maximum Allowed Amounts	Yes		Yes		Yes		Partially	The maximum allowed amounts for each food item are calculated and rolled up into a food instrument maximum allowed amount. The food instrument maximum allowed amount is used for check redemptions.

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#	Requirement	Does the System Perform this Function?	Current State Implementation Notes	Does the System Perform this Function?	Current State Implementation Notes	Does the System Perform this Function?	Current State Implementation Notes	Does the System Perform this Function?	Current State Implementation Notes
3.4	**Food Benefit Issuance**								
3.4.1	*Issue Paper Food Instruments*								
3.4.1.1	Prepare Individual Food Instruments	Yes		Yes		No	MI-WIC only performs EBT processes. MI-WIC does not produce paper food instruments.	Yes	
3.4.1.2	Print Food Instruments	Yes	The system can produce checks, vouchers, or track direct distribution of foods.	Yes	The system can produce checks or track direct distribution of foods.	No	MI-WIC only performs EBT processes. MI-WIC does not produce paper food instruments.	Yes	The system can produce checks.
3.4.1.3	Process Food Instrument Changes	Yes		Yes		No	MI-WIC only performs EBT processes. MI-WIC does not produce paper food instruments.	Yes	
3.4.2	*Issue Benefits via EBT*								
3.4.2.1	Establish EBT Account	Future Enhancement	The system will be modified to include an online EBT benefit issuance model.	Yes	The system will be implemented with an offline EBT benefit issuance model.	Yes	The system has been implemented with an online EBT benefit issuance model.	Future Enhancement	The State is making system changes to prepare for EBT.
3.4.2.2	Add Participant(s) to an Account	Future Enhancement		Yes		Yes		Future Enhancement	The State is making system changes to prepare for EBT.
3.4.2.3	Issue Electronic Benefits	Future Enhancement		Yes		Yes		Future Enhancement	The State is making system changes to prepare for EBT.
3.4.2.4	Issue EBT Card	Future Enhancement		Yes		Yes		Future Enhancement	The State is making system changes to prepare for EBT.
3.4.2.5	Obtain Account Balance	Future Enhancement		Yes		Yes		Future Enhancement	The State is making system changes to prepare for EBT.
3.4.2.6	Update EBT Account Information	Future Enhancement		Yes	Can look at balance on system and on card.	Yes		Future Enhancement	The State is making system changes to prepare for EBT.
3.4.2.7	Remove Participant(s) from an Account	Future Enhancement		Yes		Yes		Future Enhancement	The State is making system changes to prepare for EBT.
3.4.2.8	Process Changes to Electronic Benefits (Benefit Adjustments, Voids and Reissuance)	Future Enhancement		Yes		Yes		Future Enhancement	The State is making system changes to prepare for EBT.
3.4.2.9	Process Changes to EBT Card (Status Changes/Card Replacements)	Future Enhancement		Yes		Yes		Future Enhancement	The State is making system changes to prepare for EBT.
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	Yes		Yes	Accepts redemption data from bank and applies to issuance records, but most edits are done by bank.	Yes	The system performs this function for FMNP only. MI-WIC only performs EBT processes for WIC food benefits.	Yes	
3.5.1.2	Perform Edits and Authorize Vendor Payment	Performed by external system		Performed by external system		Yes	The system performs this function for FMNP only. MI-WIC only performs EBT processes for WIC food benefits.	Performed by external system	
3.5.1.3	Process Vendor Payment	Performed by external system		Performed by external system		Yes	The system performs this function for FMNP only. MI-WIC only performs EBT processes for WIC food benefits.	Performed by external system	
3.5.2	*Reconcile Food Instruments*								
3.5.2.1	Retrieve Food Issuance File	Yes		Yes		Yes	The system performs this function for FMNP only. MI-WIC only performs EBT processes for WIC food benefits.	Yes	
3.5.2.2	Retrieve the Food Instruments Redeemed File and Reconcile with Issuance File	Yes		Yes		Yes	The system performs this function for FMNP only. MI-WIC only performs EBT processes for WIC food benefits.	Yes	
3.5.2.3	Reconcile Voided, Expired, and Redeemed but Unissued Food Instruments	Yes		Yes	Reports	Yes	The system performs this function for FMNP only. MI-WIC only performs EBT processes for WIC food benefits.	Yes	
3.5.3	*Pay Vendor for Food Benefits Redeemed via EBT*								
3.5.3.1	Process Vendor Payment	Performed by external system		Performed by external system	EBT host system pays vendors.	Performed by external system	The State validates reports from the EBT host and the WIC information system to authorize vendor payments. The State pays vendors the next business day.	No	
3.5.4	*Reconcile EBT Benefits*								
3.5.4.1	Retrieve Benefit Issuance File	Future Enhancement		Yes		Yes		No	
3.5.4.2	Retrieve Transaction History Data / Reconcile Redeemed, Adjusted, Voided, and Expired Benefits with Issuance File	Future Enhancement		Yes		Yes		No	

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#	Requirement	Does the System Perform this Function?	Current State Implementation Notes	Does the System Perform this Function?	Current State Implementation Notes	Does the System Perform this Function?	Current State Implementation Notes	Does the System Perform this Function?	Current State Implementation Notes
3.6	**Financial Management**								
3.6.1	*Manage Grants and Budgets*								
3.6.1.1	Track Grants	Yes		Yes	Other sources of program income, such as participant and vendor collections, vendor overcharges, which are considered income are also tracked.	No		No	
3.6.1.2	Maintain State Agency Budget Information	Yes		No		Partially	The State can enter information to support the creation of the FNS 798 report, which is completed by a Division outside of WIC.	No	
3.6.1.3	Maintain Local Agency Budget Information	Yes		Partially	Summary level allocation to agencies is tracked, but there is no detailed chart of accounts.	Partially	The State can enter information to support the creation of the FNS 798 report, which is completed by a Division outside of WIC.	No	
3.6.2	*Monitor Program Expenditures*								
3.6.2.1	Monitor NSA Expenditures	Yes		Yes	Tracked by the FNS 798, which is integrated into the system. The system feeds the 798 spreadsheet through an automated interface.	No		No	
3.6.2.2	Monitor Food Expenditures	Yes		Yes		Yes		Yes	
3.6.2.3	Perform Financial Modeling	No		Yes		No		No	
3.6.2.4	Manage Cash Flow	Yes		No		No		Yes	
3.6.3	*Process Manufacturer Rebates*								
3.6.3.1	Estimate Total Annual Rebates	Yes		Yes	Built into the 798 modeling function.	Partially	This function is accomplished through reports.	Yes	
3.6.3.2	Calculate Rebate and Prepare Invoice	Yes		Yes		Yes		Yes	
3.6.3.3	Monitor Rebate Collections	Yes		Yes	Monitored by the 798 (which has been updated by the MPSC to include additional functions), which is integrated into the system. The system feeds the 798 spreadsheet through an automated interface.	No		Yes	
3.7	**Caseload Management**								
3.7.1	*Capture and Maintain Caseload Data*								
3.7.1.1	Capture Data on Potentially Eligible Population	Yes		No		No		No	
3.7.1.2	Capture Historical Participation Data	Yes		Yes		Yes		Yes	
3.7.2	*Allocate Caseload*								
3.7.2.1	Determine Maximum State Caseload	No		No		No		No	
3.7.2.2	Prepare Local Agency Caseload Allocation Estimates	Yes		Yes		Yes		No	
3.7.2.3	Record Caseload Allocations	No		Yes		Yes		Yes	
3.7.3	*Monitor Caseload*								
3.7.3.1	Track Actual Participation	Yes		Yes		Yes		Yes	
3.7.3.2	Conduct Caseload Reallocations	No		Yes		Yes		No	
3.8	**Operations Management**								
3.8.1	*Monitor Administrative Operations*								
3.8.1.1	Maintain Information on Local Agencies and Clinics	Yes		Yes		Yes		Yes	
3.8.1.2	Analyze Local Agency Operations			Yes	This information is available in reports for staff analysis.	Yes		No	
3.8.1.3	Support Clinic/ Patient Flow Monitoring	Yes	Participants can be toggled onsite to track arrival in the clinic.	No		Yes	The Onsite list tracks a participant from arrival in the clinic through various steps in the appointment process. Staff can see who is onsite and how long they have been in the clinic/ at their current stage of the process.	Yes	The Onsite list tracks a participant from arrival in the clinic through various steps in the appointment process. Staff can see who is onsite and how long they have been in the clinic/ at their current stage of the process.
3.8.2	*Manage Participant Outreach*								
3.8.2.1	Maintain Outreach List for Local Agencies	Yes		Yes		Yes		Yes	
3.8.2.2	Track Outreach Campaign Activities	No		Yes		Yes		Yes	
3.8.3	*Monitor Customer Service*								
3.8.3.1	Document and Track WIC Customer Service Calls	No	This can be tracked in appointment follow-up notes.	Yes		Performed by external system		No	
3.8.3.2	Document Complaints	No	This can be tracked in notes.	Yes		Yes		No	
3.8.3.3	Track Call or Complaint Outcomes	No	This can be tracked in notes.	Yes		Yes		No	
3.8.4	*Provide Survey Capability*								
3.8.4.1	Monitor Participants' Views of WIC Program Services	Yes	There is a browser-based participant survey that can be accessed through the Internet.	Yes		Yes	MI-WIC has a survey capability, but it is designed to be completed by staff.	Yes	

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#	Requirement	Does the System Perform this Function?	Current State Implementation Notes	Does the System Perform this Function?	Current State Implementation Notes	Does the System Perform this Function?	Current State Implementation Notes	Does the System Perform this Function?	Current State Implementation Notes
3.8.5	*Maintain Inventory*								
3.8.5.1	Maintain Inventory of Serialized Items	Yes	The system has an extensive breast pump inventory function.	Yes	The system has an extensive breast pump inventory function.	Yes	The system has an extensive breast pump inventory function.	No	
3.8.5.2	Maintain Inventory of Non-Serialized Items	Yes		Yes		Yes	The system can track non-serialized breastpumps.	No	
3.8.6	*Monitor Program Integrity*								
3.8.6.1	Monitor Participant Integrity	No		Yes		Yes		No	
3.8.6.2	Monitor Clinic Integrity	No		Yes	The system includes reports that track anomalies by percentage, including: No Nutr Education Percentage, No Income Percentage, Infants Percentage, Multiple Births Percentage, Cert Appts Percentage, No shows Percentage, and Benefits Outside Hours Percentage.	Partially	This function is performed based on reports.	No	
3.8.6.3	Track Participant Sanctions	Yes		Yes		Yes		Yes	
3.8.6.4	Track Administrative Hearings	Yes		Yes		Yes		Yes	
3.9	**Vendor Management**								
3.9.1	*Manage Vendor Peer Groups*								
3.9.1.1	Establish Vendor Peer Groups	Yes	The system supports vendor peer grouping, but the peer group assignment is manual.	Yes	The system supports automated vendor peer grouping, but the peer group assignment can be manually assigned.	Yes	The system supports vendor peer grouping, but the peer group assignment is manual.	Yes	The system supports vendor peer grouping, but the peer group assignment is manual.
3.9.1.2	Update Vendor Peer Group/Criteria	Yes		Yes		Yes		Yes	
3.9.2	*Create and Locate Data Records*								
3.9.2.1	Create New Applicant Record	Yes		Yes		Yes		Yes	
3.9.2.2	Search for Vendor Record	Yes		Yes		Yes		Yes	
3.9.3	*Maintain Vendor Authorizations*								
3.9.3.1	Maintain Vendor Application Data	Yes	There is an online vendor application function.	Yes		Yes	The system has an external vendor application that allows vendors to enter and submit program application data online.	Yes	Existing vendors can update demographic information through an online process. New vendors cannot apply online.
3.9.3.2	Track Vendor Authorization Process	Yes		Yes		Yes	Milestones in the vendor authorization process are tracked.	Yes	
3.9.3.3	Maintain Vendor Price Survey Data	Yes	There is an online price survey data collection function.	Yes	There is an online price survey data collection function.	Yes	There is an online price survey data collection function.	Yes	There is an online price survey data collection function.
3.9.3.4	Authorize Vendors	Yes		Yes		Yes	The State has a vendor limiting policy. This policy is supported by the use of a GIS (geographic information system) function. The system interfaces with the Michigan Department of Agriculture for verification of retailer licenses.	Yes	
3.9.3.5	Maintain Authorized Vendor Data	Yes		Yes		Yes		Yes	
3.9.4	*Monitor Vendor Training*								
3.9.4.1	Track Scheduled Vendor Training	Yes		Yes		Yes		Yes	
3.9.4.2	Track Attendance at Vendor Training and Technical Assistance Conducted	Yes		Yes		Yes		Yes	
3.9.5	*Support Vendor Communications*								
3.9.5.1	Produce Correspondence to Vendors	Yes		No		Yes	The system can produce individual or bulk labels.	Yes	
3.9.6	*Perform Confidential High Risk Vendor Analysis*								
3.9.6.1	Determine Vendor Peer Group (High Risk Analysis)	Yes		Yes		Yes		No	The system supports vendor peer grouping, but the peer group assignment is manual.
3.9.6.2	Determine High Risk Vendors (Paper Environment)	Yes		Yes		No	This is not applicable because the system is EBT only.	Yes	
3.9.6.3	Determine High Risk Vendors (EBT Environment)	Future Enhancement		Yes		Yes		No	
3.9.7	*Track Compliance Investigations*								
3.9.7.1	Maintain Special Investigator Record for Compliance Buys	Yes		Yes		Yes		Yes	
3.9.7.2	Maintain Food Benefit Redemption Data from Compliance Buys	Yes		Yes		Yes		Yes	
3.9.7.3	Maintain Compliance Buy Data	Yes		Yes		Yes		Yes	
3.9.7.4	Support Inventory Audits	Yes		Yes		Yes		Yes	
3.9.8	*Track Routine Monitoring*								
3.9.8.1	Maintain Routine Monitoring Data	Yes		Yes		Yes		Yes	

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#	Requirement	Does the System Perform this Function?	Current State Implementation Notes	Does the System Perform this Function?	Current State Implementation Notes	Does the System Perform this Function?	Current State Implementation Notes	Does the System Perform this Function?	Current State Implementation Notes
3.9.9	*Monitor Sanctions and Appeals*								
3.9.9.1	Manage Vendor Sanctions	Yes		Yes		Yes		Yes	
3.9.9.2	Monitor and Track CMP Payments	Yes		Yes		Yes		No	
3.9.9.3	Maintain Vendor Appeal Data	Yes		Yes		Yes		Yes	
3.9.10	*Coordinate with Food Stamp Program*								
3.9.10.1	Maintain Food Stamp Program Violation Data	Yes		Partially	Food stamp violations can be tracked in the vendor violations area, but there are no specific fields that track Food stamp terminations or violations.	Yes		Yes	
3.9.10.2	Report WIC Sanctions to the Food Stamp Program	Yes	Can run a report to share with FSP.	No		Yes		No	The system can produce a report that can be used to share information with the Food Stamp Program
3.10	**Scheduling**								
3.10.1	*Maintain Master Calendar*								
3.10.1.1	Maintain Master Calendar	Yes		Yes	The master calendar can be customized by local agency and includes templates to create schedules.	Yes	The master calendar can be customized by local agency and includes templates to create schedules.	Yes	
3.10.2	*Manage Appointments*								
3.10.2.1	Perform Appointment Scheduling	Yes	Appointments are scheduled by participant in agency-defined columns. Appointment history is maintained.	Yes	Appointments are scheduled by family or participant in agency-defined columns. Appointment history is maintained. Users can search for appointment slots and document appointment preferences.	Yes	Appointments are scheduled by family or participant in agency-defined columns. Appointment history is maintained. A monitoring function tracks the creation and changes made to an appointment. Users can search for appointment slots by appointment preferences. If appointment slots are limited and the client wants an earlier appointment if one becomes available, the system provides an alert if an appropriate slot becomes available. To enforce the 10/20 day processing standards, the system includes alerts that are triggered if the user attempts to schedule an appointment outside of the appropriate parameters for the participant.	Yes	Appointments are scheduled by family or participant in agency-defined columns. Appointment history is maintained. Users can search for appointment slots by appointment preferences.
3.10.2.2	Perform Mass Rescheduling	Yes		Yes		Yes		Yes	
3.10.2.3	Track Appointment Outcomes	Yes		Yes		Yes		Yes	
3.10.3	*Generate Appointment Notices*								
3.10.3.1	Generate Appointment Notices	Yes		Yes		Yes		Yes	
3.11	**System Administration**								
3.11.1	*Maintain System Data Tables*								
3.11.1.1	Maintain System Code Table Data	Yes		Yes		Yes		Yes	
3.11.2	*Administer System Security*								
3.11.2.1	Locate User Record	Yes		Yes		Yes		Yes	
3.11.2.2	Maintain User Identification	Yes		Yes		Yes		Yes	
3.11.2.3	Maintain User Capabilities	Yes	Roles are used to manage user access (view/update/no access) to screens, fields, and buttons.	Yes	Roles are used to manage user access (view/update/no access) to screens, fields, and buttons.	Yes	Roles are used to manage user access (view/update/no access) to screens, fields, and buttons.	Yes	
3.11.2.4	Monitor Unauthorized Access	Yes		Yes		Yes	The current implementation uses the States Single Sign On (SSO), which provides one userID for multiple State of Michigan applications.	Yes	
3.11.2.5	Monitor Record Updates	Yes		Yes		Yes		Yes	
3.11.3	*Manage System*								
3.11.3.1	Perform System Back-Up/Restoration	Yes		Yes		Yes		Yes	
3.11.3.2	Import/Export Data Files	Yes		Yes		Yes		Yes	
3.11.3.3	Provide Version Control	Yes		Yes		Yes		Yes	

		SPIRIT SAM Consortium		Mountain Plains States Consortium (MPSC)		Michigan MI-WIC		Maryland WOW	
#	**Requirement**	Does the System Perform this Function?	Current State Implementation Notes	Does the System Perform this Function?	Current State Implementation Notes	Does the System Perform this Function?	Current State Implementation Notes	Does the System Perform this Function?	Current State Implementation Notes
3.11.4	*Archive System Data*								
3.11.4.1	Archive and Restore Historical Data	Yes	Records are moved to a hidden agency, which can be accessed if necessary.	Yes		Yes		Yes	Copies of the database are maintained, so historical information that has been purged from the active database can be reloaded if needed.
3.11.4.2	Purge Unnecessary Data	Yes	Partial records (i.e., no certifications attached) that do not have activity for 60 days are removed.	Yes	Partial records (i.e., no certifications attached) that do not have activity for 60 days are moved from a pending to an ineligible status.	Yes	Partial records (i.e., no certifications attached) that do not have activity for 60 days are removed.	Yes	Data are purged based on date parameters.
3.12	**Reporting**								
3.12.1	*Generate Standard Reports*								
3.12.1.1	Generate Standard Reports	Yes	Reports can be produced in pdf format. The system also produces mailing labels.	Yes	Reports can be produced in pdf or excel format. The system also produces mailing labels.	Yes	Reports can be produced in pdf format. The system also produces mailing labels.	Yes	Reports can be produced in pdf format. The system also produces mailing labels.
3.12.2	*Conduct Ad Hoc Queries and Generate Reports*								
3.12.2.1	Conduct Ad Hoc Queries and Generate Reports	Yes	The system has an ad hoc report generator that can be used to created ad hoc reports that can be printed, saved, or exported to MS Excel.	Yes	The system uses Microsoft SQL Server Reporting Services for ad hoc reporting via a data warehouse that has been denormalized for easy reporting.	Yes	The State can perform ad hoc reports using BIQuery. Local agency ad hoc reporting is also available.	Partially	State level users have tools they can use to get information from the system. There is no ad hoc tool available for local users.
3.12.3	*Maintain Data Warehouse*								
3.12.3.1	Maintain Data Warehouse	No		Yes		Yes	MDCH maintains an enterprise-wide Teradata based data warehouse. MI-WIC will feed data to the data warehouse	No	