



STATE OF MARYLAND

DHMH

Maryland Department of Health and Mental Hygiene

201 W. Preston Street • Baltimore, Maryland 21201

Martin O'Malley, Governor – Anthony G. Brown, Lt. Governor – John Colmers, Secretary

STATE OF MARYLAND
DEPARTMENT OF HEALTH & MENTAL HYGIENE

Family Health Administration
CATS II TORFP # M00B0400673
OPASS # 10-10390
WIC on the Web (WOW) System Support

Addendum #1

Issued: August 31, 2010

Recipients of this addendum are required to complete and submit the Addendum Acknowledgement Receipt that is the last page of this document. **A copy of the completed Addendum Acknowledgement Receipt must be included in your TORFP Submission.**

All persons who are known by the Issuing Office to have received the above-referenced Task Order Request for Proposals (TORFP) are hereby advised of the following revisions:

Added:

Attachment 16, Option 1: Enhancement #1 – Delaware System Transfer and Support.

3.2.1.9 Option 1, System Enhancement #1

- System Enhancement Proposal for the Delaware System Transfer and Support Project as set forth in Attachment 16, Option 1: Enhancement #1 – Delaware System Transfer and Support. The Master Contractor must clearly communicate their understanding of the project, including any assumptions made in developing their proposal.

Modified:

KEY INFORMATION SUMMARY SHEET

Closing Date and Time: Remove the due date 9/15/2010 at 2:00 PM ET and replace with **9/22/2010 at 2:00 PM ET.**

3.2.2 FINANCIAL RESPONSE

Remove the second bullet and replace with:

- Attachment 1.1 – 1.4 (Time and Materials) and Attachment 1A (Fixed Price) **and Attachment 1B Option 1 – Estimated Price Proposal (Fixed Price)** – Completed Financial Proposal with all rates fully loaded.

All other terms and conditions remain unchanged.

This Addendum is issued under the authority of State Procurement Regulations, COMAR 21.05.02.08 and with the approval of the Procurement Officer.

Date

Sharon R. Gambrill
Procurement Officer, Office of Contract Policy,
Management and Procurement

ADDENDUM ACKNOWLEDGEMENT RECEIPT

I acknowledge receipt of Addendum #1 to CATS II TORFP Project # M00B0400673 titled "WIC on the Web (WOW) System Support" and dated August 31, 2010.

Vendor's Name

Authorized Signatory - (Print)

Signature

Date

ATTACHMENT 16

Option 1: Enhancement #1 - Delaware System Transfer and Support

1.1 PROJECT OVERVIEW

This enhancement project will provide the Delaware (DE) WIC Program with a USDA FNS FReD-compliant web-based WIC system by transferring the successful Maryland WIC on the Web (WOW) system to Delaware. Delaware will share Maryland WIC's software, servers and existing infrastructure (hardware, software and support resources) as is currently done for the Virgin Islands.

The DE WIC System Transfer and Support project is considered to consist of seven tasks:

Task 1: Project Initiation

Task 2: Analysis

Task 3: Design/Development

Task 4: Testing

Task 5: Implementation

Task 6: Development Project Closure

Task 7: Support and Maintenance (NOTE: Provided through the Maintenance and Support portion of the TORFP)

This project requires nine system design and development modifications that are addressed in this document. WOW will be made available to DE WIC in a hosted model. Under MD Hosting, DE WOW would be developed as a modification of the existing MD WOW application and implemented securely and separately on existing MD WIC infrastructure which meets DE DTI security standards. Essentially, the DE WOW system is handled by an additional instance of a WOW database on the Maryland database server.

All tasks through User Acceptance Testing and Pilot will be performed using resources drawn from DE WIC, MD WIC and the TO Contractor.

DE WIC has developed a tentative schedule of events to successfully complete this transfer project. The Project Plan anticipates initiation of this enhancement project to begin in January, 2011 and project closure by April 2012. The support and maintenance portion of this project will continue through the period of performance of the TORFP which concludes May 31, 2014.

1.2 DELAWARE WIC PROGRAM OVERVIEW

The DE WIC program services 24,250 clients in the three-county State of Delaware. The program profile is similar to the nationwide profile noting DE WIC currently has five participant types. DE WIC utilizes an integrated health and social services workflow. This is centered on a system named the Master Client Index (MCI). The MCI in Delaware is a hub of information about constituents served in the state's Health and Social Services program network. It collects

name, address, phone, (and other contact information), and programs participated in. All WIC participants will also have an MCI Record ID. Currently, the DE WIC system makes the participant ID and the MCI Record ID the same number. An additional field will be required to note MCI Record ID and link it to Participant ID.

Whenever a WIC participant or a prospective WIC participant comes into a clinic for services, the WIC system will need to query the MCI database in real time and check to see if the participant is registered in other programs (adjunct eligibility) and to determine if the demographic information is accurate. The WIC system will also look for potential duplicates. There will be a read only analysis and the system user will need to determine the best method of addressing the duplicate situation. The WIC system will not be allowed to delete MCI Records. This can only be done in the MCI system.

Once the process begins, the model is very similar to conventional WIC certification processes. DE WIC understands the system will have an implied workflow. However, it should be noted that DE WIC has a variety of workflow configurations in its clinics including assembly line approaches. DE WIC expects that the system will allow for the user to progress through the system in a sequence compliant with WIC recommended practices, but also allows the user latitude to use the system in such a way to maximize their productivity.

1.3 ASSUMPTIONS MADE BY DELAWARE WIC FOR MARYLAND WOW TRANSFER

The following assumptions were made by the Delaware WIC Program when assessing the feasibility of transferring the WOW system:

1.3.1 Caseload, Clinics and Users

MD WIC already supports 150,000 participants each month in 89 clinics with 350 WIC staff/users across the state. The DE WIC caseload of ~24,000 participants is less than 25% to the existing MD WIC system capacity. Therefore, it is reasonable to assume the transfer system can meet the worst case growth anticipated by DE WIC.

1.3.2 Volume

The MD production system uses a SAN for storage; the capacity of the SAN is currently about 432 gigabytes (consisting of 12 x 36 gig drives), of which more than 100 gigabytes is currently free. Adding the DE WOW will consume less than five gigabytes of storage space (less than 5% of available free space). DE WOW can be supported in the MD WIC production environment for the foreseeable future with no impact on volume requirements.

1.3.3 Telecommunications

DE WOW will require reliable telecommunication lines operating at 256 kbps (fractional T1 line) or better to support system performance with reasonable response times. DE WOW is capable of operating under slower telecommunication lines but with decreased response times. Delaware's telecommunications infrastructure is mature and entirely digital. T1 and DSL are used for networking to clinics. The State switching/routing hardware is considered to be "high speed" Internet capable.

1.3.4 Response Times and Performance

Response times are directly proportional to telecommunication line capacity. MD WIC infrastructure uses full T1 lines operating at 512 kbps and achieves a response time of under 0.5 second for a screen load (from point of request to full display). DE WOW operating on its currently existing lines can expect to achieve fully reasonable response times in which a screen load will occur in less than one second.

DE WOW performance is largely dependent on the bandwidth and usage of the telecommunications infrastructure in Delaware. Additional performance considerations include the MD WIC servers. The MD WIC servers and production environment include state-of-the-art Blade servers, a web accelerator, and a SAN disk array, all of which are scaled with sufficient capacity to host DE WOW for the next four years and more.

1.3.5 Saturation Analysis

The capacity requirements for DE WOW for the next four years include at least five gigabytes of hard disk space on the MD WIC SAN, adequate telecommunication lines in DE, and the reliable operation of the MD WIC production environment. The implementation of DE WOW in DE meets the anticipated saturation.

1.3.6 System Hardware - The DE WOW system will be implemented separately and securely on existing MD WIC infrastructure sharing core RMDB components. The MD WOW system is currently operational on infrastructure exceeding the capacity requirement for the addition of the DE WOW system. The project will require the purchase of additional firewalls given the strict security requirements of the State of Delaware. User side hardware is not anticipated to change although scanners will be added and DE WIC's TROY voucher printers will need additional programming.

1.3.7 Administer System Security

The system will adhere to all DE DTI and DHSS standards for system security.

1.3.8 Data Exchange

Integration must be developed to accommodate the transmission and receipt of data from various agencies. The system will both transmit and receive data from these agencies and update the client files. All transfers must be encrypted to safeguard data. Some of the agencies or entities with which the WIC system will exchange information include:

- File Transfer, Output only: CDC;
- File Transfer, Output only: USDA;
- File Transfer, Output only: MARO – Various Reports;
- File Transfer, Output only: Formula Warehouse;
- File Transfer, Input/Output: Financial institution(s);

- Real Time, Read Only: State of DE Immunization System;
- Real Time, Read/Write: State of DE Master Client Index;
- Real Time, Read Only: State of DE Lead Tracking System
- Real Time, Read Only: Medicaid/SNAP/TANF for adjunct eligibility.

1.3.9 Architecture

Functionally the WOW system architecture is logically separated into five layers: client, presentation, business, data access, and RDBMS.

1.3.9.1 Technical Architecture

The Technical Architecture of the WOW system architecture will consist of four separate physical layers or tiers. The Client tier, existing effectively on the public internet is separated from the application through a secure firewall and each subsequent physical/architectural layer of the application, the Presentation tier, the Business Application tier and the Database tier, are physically separated and logically segmented through additional secure firewalls.

The client tier consists of the Internet Explorer version 5.5 or higher running on desktop and laptop computers using Microsoft Windows XP. The front-end uses Secure Socket Layer (SSL) protocol via HTTPS over data lines (T-1, DSL and cable modems) to connect to the web server. Hosted at MD WIC, the web server will use the Redline Web Accelerator server to improve network performance. The web server communicates with the WIC IS system behind a firewall.

This three tier architecture is a Delaware Standard for internet facing application managing data classified as Secret. Since WIC participant data meets the qualifications for Secret data and since the new DE WOW application is internet facing, modifications to the WOW system housed on the MD DHMH network are a requirement for the implementation of DE WOW.

The WOW data is housed and managed in a centralized Oracle 10g database connected to a clustered RAIDED SAN.

1.3.9.2 Architectural Structure and Capacity

All hardware devices must meet Open System Interconnection (OSI) and open architecture standards in order to maximize the opportunities for future hardware additions and to reduce the potential negative impacts of proprietary systems.

1.3.9.3 Environments

The hardware has been broken out into multiple segments. The segments are organized according to logical breakdowns within a WIC system implementation. Those are:

1.3.9.3.1 The Central Site (Production, Development, Test and Training) The DE WOW application will be installed on servers in the MD WIC system environment. The application is a web based system with centrally hosted code and data. The system configuration is separated into three tiers: database, application and presentation with a data access layer.

1.3.9.3.2 The Recovery Site (Hot Backup) MD WIC maintains a “Hot” Recovery site located at least 30 miles distant from the state office located at 201 W. Preston Street, Baltimore, MD 21201. This site maintains a scaled down

production environment (no clustering, less redundancy) with data being replicated in “almost” real-time from the Production environment in Baltimore, MD. The DE WOW application would be included in this Recovery scenario.

Disasters affecting the Central Site, which is inclusive of failure of critical support systems such as power and cooling, would trigger migration to the Hot Site with minimal interruption of DE WOW functionality.

1.3.9.3.3 User Environment (Client Configurations (Workstations, Printers)) The implementation vendor will be required to provide an assessment of existing Client Tier computer hardware. The clinics currently have approximately 60 Dell workstations, 12-14 TROY Voucher Printers and 16 LaserJet Report printers. At present, this hardware appears sufficient to support the new system.

1.3.10 Communications

Delaware’s telecommunications infrastructure is mature and entirely digital. TLS and DSL are used for networking to clinics. The State switching/routing hardware is considered to be “high speed” Internet capable.

1.3.11 Data Quality and Transmission Standards

WIC Data in the State of Delaware is classified: Secret. This is defined as:

State of Delaware Secret – Information that, if divulged, could compromise or endanger the people, or assets of the State; such as Public Safety Information, Data that is specifically protected by law (e.g., HIPAA).

This requires the data to be:

- *encrypted on media leaving the State Infrastructure and when crossing any network, (the State of Delaware standard for encryption is AES.)*
- *auditable at the transaction level by unique user ID,*
- *authN/authZ compliance is required.*

1.3.12 Upgrade and Expansion: Network

The implementation of secure T-1 connectivity between the MD and DE networks would provide a secure path for data interfaces between the DE WOW application and other DE DHSS systems. It is possible this connectivity could be accomplished using secure private tunnels over the public internet. The implementation vendor will be required to fully assess security, response times and performance requirements for this connectivity and report to the Project Team who will make the decision regarding implementation of the secure T1 line.

1.3.13 Ability to Conduct Ad Hoc Queries and Generate Reports

The DE WIC Program staff members sometimes need specific information that does not exist in a usable format in any standard report. The most effective approach to meeting these “on demand” reporting requirements is through an ad hoc reporting tool.

The ad hoc reporting tool will provide the capability for the user to enter selection parameters that will be used to retrieve data that meets the entered criteria. The ad hoc tool then will display the results to the screen, generate a hard copy report, or create a data extract file. Delaware staff will be able to access the DE WOW database and perform ad hoc queries.

1.4 PROJECT ORGANIZATION

The project will be managed by the DE WIC Program with support from DE IRM and IMS. Project staffing will consist of resources from three groups; DE state resources which will include DE WIC, DE Information Management Services (IMS) and DE Information Resource Management (IRM) staff, TO Contractor resources and a small component of addition resources directly contracted with DE WIC to assist in Project Management and Data Conversion.

Project management resources for DE State will include the DE WIC Director, the DE WIC Project Coordinator, the DE IMS Business Analyst and a DE IRM Project Manager. Other DE WIC resource requirements will be eight staff who will be involved in JAD session, development of Functional Design document, User Acceptance Testing, Training and Rollout. Other DE IRM resources will include two development resources, a programmer and a network technician. These resources will advise on the development of the Security Plan, the Disaster Recovery Plan, the Functional Design document, System Testing, Rollout and other tasks.

The TO Contractor will transfer, modify and implement the DE WIC system to DE WOW under the terms of MOUs and a Statement of Work to be executed between the DE WIC and MD WIC. The TO Contractor will be the vendor contracted to support MD WOW at the time of the project.

Additional DE contracted resources will include a Project Management resource and a technical resource to assist with Data Conversion.

1.4.1 Project Management and Project Control Related Deliverables and Activities in Project A list of deliverables and activities generated under the Project Plan, and subject to the Project Control Plan, will ensure deliverables of the DE WOW implementation project will be available to the project team and project sponsors at the Project Repository.

1.4.2 Project Control Activities Communications Management is the structured approach to planning for, generating, coordinating, and distributing project information throughout the duration of a project. Project communications occurs in many fashions (formal meeting, informal meeting, casual discussion, etc.) and in many media (phone, email, web, in person, etc.). Communications Management addresses how these encounters be documented, disseminated, and archived for future reference. To this end the Project Managers will develop a Project Repository for the collection, distribution and archiving of Project documentation including Change Management, Risk Management and Issue Management documents.

1.4.3 Training Activities The training plan is intended to guide the process of developing and conducting training for the DE WIC staff, including State and local levels, to work with the new WIC Management Information System, to enable the implementation of the

system, and to maximize its effectiveness. The training activities will immediately precede and be accomplished in concert with the phased rollout implementation of the new system. In addition, training materials and methods will continue to be employed on an on-going basis after the conclusion of new system implementation as integral components of training for all new WIC staff. Due to the state's small state staff size, it is DE WIC's intent to have the TO Contractor perform all of the training sessions through rollout.

The contracted system developer will provide the lead in training activities. However; the DE WIC Project Manager will coordinate schedules, activities and communication for DE WIC staff.

1.4.3.1 Types of Training

- State Agency Program Staff Training
- Central System Operation and Maintenance Staff Training
- Just in Time "Hands On" Clinic Staff Training
- Web-Based Training Modules
- Report Writing and Analysis Training
- System Administrator/Clinic and State Technical Support (Super-User)/State Staff
- Help Desk Training and Training Support

1.4.4 Data Conversion Data Conversion for this project will be accomplished by a combination of a resource contracted by DE WIC to review, analyze and clean data from the existing DE WIC system and the TO Contractor who will be responsible for converting and importing the legacy DE data into the DE WOW. The DE contracted resource will produce reports of the data quality and work with the project team to obtain accurate data from the legacy system. The TO Contractor will define data maps and write conversion routines and provide reports of any data conversion issues, problems or exceptions. The data conversion will take place prior to system implementation.

1.4.5 Upgrade and Expansion: Network The implementation of secure T-1 connectivity between the MD and DE networks would provide a secure path for data interfaces between the DE WOW application and other DE DHSS systems. It is possible this connectivity could be accomplished using secure private tunnels over the public internet. The implementation vendor will be required to fully assess security, response times and performance requirements for this connectivity and report to the Project Team who will make the decision regarding implementation of the secure T1 line.

1.5 APPLICATION MODIFICATIONS MD WOW for DE WOW

The following modifications are to be incorporated into the existing baseline code used by both the Maryland and Virgin Island WIC Programs. These modifications must be incorporated without impacting the current application used by Maryland and Virgin Islands users.

1.5.1 Interfaces (Real Time)

MCI: The system should be modified to interface with the DE Master Client Index (MCI) in real time, read only access. This interface will require the association of a MCI Number with the Participant ID in the system. The DE WOW is requires a new MCI ID Number when a new WIC participant is being added to the system who does not already have a MCI Number. The MCI system shall perform the number designation and pass the value to the WIC system for display.

VACATTACK: The WIC system should be modified to interface with the DE Immunization System (VACATTACK). This interface will require the association of a Master Client Index Number with the Participant ID in the system. The new WIC system will utilize the MCI number to query the VACATTACK system for the participant's most recent Immunization records for display only in the WIC system.

DE WIC's current system interfaces with the State of DE immunization registry. DE WIC envisions the new system will do the same. The new system will provide a read only screen for immunization data. This interface will be a real time read only interface to the WIC system.

Lead Screening: System shall receive lead screening data from Lead Screening System.

Medicaid/SNAP/TANF: System shall received adjunct eligibility information from the Medicaid/SNAP/TANF system.

1.5.2. Document Scanning The system shall be equipped to work with Document Scanners in each clinic to make the process as paperless as possible.

1.5.3 Suggest Nutrition Education Topics This system shall be modified to present suggested education topics for users to suggest to participants. These are to be suggested based on risk codes identified in the risk assessment. This shall be a configurable list from the systems administration module of the system.

DE WIC envisions a nutrition education feature set providing the user with suggested topics based on risk, but allows the user to tailor the nutrition education plan for the participant. The system will track education provided and include functionality for scheduling nutrition education sessions.

The care plan will provide this standard template with a pick lists for each area. These include populating risks identified in assessment. The system will provide a pick list of typical diagnoses to choose from. Also, a list of potential goals will be included for the intervention portion. These will not be automatically populated. The system will provide a user interface with the program to populate these pick lists from the system administration module.

1.5.4. Vendor Bid: The system is required to be modified to address the vendor bid process utilized in DE. DE WIC uses bid price process to determine vendors in the program and prices for certain products. This bid is conducted at an appropriate time before the agreement

term expires and also serves as a new vendor application period. To prepare for this bid DE WIC performs an analysis on the USDA rules updates summary. They then perform document updates, some of which relate to the vendor group. Directly resulting from this is the creation/update of the Vendor Application/Bid package which will be made available to the Vendor Community. This includes the foods to be bid.

DE WIC then holds a Vendor Bid Meeting. After the meeting the Vendor community has a month to submit bids. During this month the DE WIC vendor team maintains the process.

After the bid and application process is closed the DE WIC team assembles and organizes the bids. The information from the bids is analyzed to determine the candidates for acceptance. Official notifications are then sent out. The prices that are bid are inserted into the system to become active at the next contract year start date.

1.5.5 Breastfeeding Program: The system shall be modified to include a Breastfeeding Peer Counseling module similar to the Kentucky WIC System's module of the same name.

1.5.6 Electronic Signature Implementation: DE WIC currently uses an Electronic Signature Process. The new system will be required to utilize the electronic signature process and pads in place in DE today.

1.5.7 MICR Printer Updates: DE WIC utilizes a different MICR printer than MD (Troy versus Source Technology). The driver for these printers will need to be written.

1.5.8 Network Zone DMZs (Tiering of the System): DE utilizes a network zone security requirement that will need to be addressed in project. This will require a level of effort from the TO Contractor to make the changes to address the security requirement

1.5.9 Branding: The system shall be branded with the Delaware logo and program name.

1.6 DELIVERABLES

The required deliverables for the Delaware System Transfer and Support Project are listed below. Within each task, the TO Contractor may suggest other subtasks or deliverables to improve the quality and success of the project.

- 1.6.1 Task 1: Project Initiation
- Project Status Reports – Monthly
 - Project Status Meetings – Biweekly
 - Delivery Acceptance Plan
 - Issue Management Plan
 - Change Control Management Plan
 - Work Plan and Schedule
 - Disaster Recovery Plan

- System Security Plan
 - Training Plan
- 1.6.2 Task 2: Analysis
- JAD Sessions
 - Detailed Functional Design Document for Application Modifications
- 1.6.3 Task 3: Design/Development
- Application Interface Requirements
 - Data Conversion
 - Design
 - Table Values
 - Dropdown Values
 - Risk Factors
 - Food Packages
 - System Modifications
 - Client System
- 1.6.4 Task 4: Testing
- System Testing
 - User Acceptance Testing
- 1.6.5 Task 5: Implementation
- System Pilot
 - User Manual
 - User Training
 - Rollout
- 1.6.6 Task 6: Development Project Closure
- 1.6.7 Task 7: Support and Maintenance

1.7 TECHNICAL PROPOSAL

The TO Contractor is required to submit a technical proposal that explains the proposed services to be provided for the Delaware System Transfer and Support Project. The technical proposal shall be comprised of the following:

- Executive Summary: A high level overview of the Master Contractor's understanding of the background, purpose, and objectives of the Delaware System Transfer and Support Project. The Executive Summary shall summarize the proposed methodology and solution for achieving the objectives of the project.
- Proposed Solution: A narrative of the Master Contractor's proposed methodology and solution for completing the deliverables in Section 1.6 of Attachment 16. This section should include a draft

schedule of tasks and estimated times frames for completing all deliverables, including any tasks to be performed by State or third party personnel.

- Draft Risk Assessment: Identification and prioritization of risks inherent in meeting the requirements of this Option.
- Assumptions: A description of any assumptions formed by the Master Contractor in developing the Technical Proposal. Master Contractors should avoid assumptions that counter or constitute exceptions to TORFP terms and conditions.
- Proposed Tools: A description of any tools, for example hardware and/or software applications that will be used to facilitate the work.

1.8 PRICE PROPOSAL

The TO Contractor is required to submit a fixed price cost estimate for the transfer of the Maryland WOW system to the State of Delaware. TO Contractors are to submit their best estimate based on the criteria contained in this document.

1.9 EVALUATION CRITERIA

The technical and price proposals submitted as a result of this addendum will not be taken into consideration when evaluating the proposals for the WOW System Support TORFP, but will be used by the USDA and the State of Delaware and the State of Maryland to determine if the project will proceed. The proposals will be used to ensure the TO Contractor has a reasonable understanding of the expectations for this option and to obtain estimated costs.

2.0 NOTICE-TO-PROCEED

Submission of technical and price proposals for this option does not guarantee that the WIC Program will proceed with exercising this option. If WIC chooses to proceed, a clearly referenced Notice-to-Proceed for Option 1: Enhancement #1 - Delaware System Transfer and Support will be issued to the TO Contractor. If WIC chooses not to proceed, the amount submitted for Option 1 shall not be paid.

