

## IT Project Proposal Report - Detail

**Agency: 022 - DEPT OF INSURANCE**

**Budget Cycle: 2013-2015 Biennium**

**Version: AF - AGENCY FINAL REQUEST**

### IT Project : Nebraska Exchange

#### General Section

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<b>City :</b> Lincoln		<b>NITC Score :</b>
<b>State :</b> Nebraska	<b>Zip :</b> 68508	

#### Expenditures

IT Project Costs	Total	Prior Exp	FY12 Appr/Reappr	FY14 Request	FY15 Request	Future Add
<b>Contractual Services</b>						
Design	12,000,000	0	6,000,000	5,000,000	1,000,000	0
Programming	85,000,000	0	40,000,000	30,000,000	15,000,000	0
Project Management	7,719,137	719,137	3,000,000	3,000,000	1,000,000	0
Data Conversion	6,000,000	0	3,000,000	2,000,000	1,000,000	0
Other	20,000,000	0	8,500,000	6,000,000	5,500,000	0
<b>Subtotal Contractual Services</b>	<b>130,719,137</b>	<b>719,137</b>	<b>60,500,000</b>	<b>46,000,000</b>	<b>23,500,000</b>	<b>0</b>
<b>Telecommunications</b>						
Data	6,000,000	0	3,000,000	2,500,000	500,000	0
Video	0	0	0	0	0	0
Voice	3,000,000	0	1,500,000	1,200,000	300,000	0
Wireless	0	0	0	0	0	0
<b>Subtotal Telecommunications</b>	<b>9,000,000</b>	<b>0</b>	<b>4,500,000</b>	<b>3,700,000</b>	<b>800,000</b>	<b>0</b>
<b>Training</b>						
Technical Staff	2,500,000	0	1,250,000	1,000,000	250,000	0
End-user Staff	2,500,000	0	1,250,000	1,000,000	250,000	0
<b>Subtotal Training</b>	<b>5,000,000</b>	<b>0</b>	<b>2,500,000</b>	<b>2,000,000</b>	<b>500,000</b>	<b>0</b>

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## Expenditures

IT Project Costs	Total	Prior Exp	FY12 Appr/Reappr	FY14 Request	FY15 Request	Future Add
<b>Other Operating Costs</b>						
Personnel Cost	1,398,720	126,830	0	635,945	635,945	0
Supplies & Materials	263,742	23,742	0	200,000	40,000	0
Travel	57,451	17,451	0	25,000	15,000	0
Other	0	0	0	0	0	0
<b>Subtotal Other Operating Costs</b>	<b>1,719,913</b>	<b>168,023</b>	<b>0</b>	<b>860,945</b>	<b>690,945</b>	<b>0</b>
<b>Capital Expenditures</b>						
Hardware	91,250,000	0	20,000,000	10,000,000	5,000,000	56,250,000
Software	54,062,500	0	22,000,000	13,000,000	5,000,000	14,062,500
Network	20,875,000	0	5,000,000	2,500,000	1,000,000	12,375,000
Other	19,500,000	0	8,500,000	6,000,000	5,000,000	0
<b>Subtotal Capital Expenditures</b>	<b>185,687,500</b>	<b>0</b>	<b>55,500,000</b>	<b>31,500,000</b>	<b>16,000,000</b>	<b>82,687,500</b>
<b>TOTAL PROJECT COST</b>	<b>332,126,550</b>	<b>887,160</b>	<b>123,000,000</b>	<b>84,060,945</b>	<b>41,490,945</b>	<b>82,687,500</b>

## Funding

Fund Type	Total	Prior Exp	FY12 Appr/Reappr	FY14 Request	FY15 Request	Future Add
General Fund	0	0	0	0	0	0
Cash Fund	82,687,500	0	0	0	0	82,687,500
Federal Fund	249,439,050	887,160	123,000,000	84,060,945	41,490,945	0
Revolving Fund	0	0	0	0	0	0
Other Fund	0	0	0	0	0	0
<b>TOTAL FUNDING</b>	<b>332,126,550</b>	<b>887,160</b>	<b>123,000,000</b>	<b>84,060,945</b>	<b>41,490,945</b>	<b>82,687,500</b>
<b>VARIANCE</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

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## IT Project: Nebraska Exchange

### EXECUTIVE SUMMARY:

Nebraska Department of Insurance is the state agency designated to administer the Nebraska Health Insurance Exchange. The Exchange is responsible for complying with the mandates required within the Patient Protection and Affordable Care Act (PPACA), including the implementation of a Health Insurance Exchange to facilitate access to affordable health insurance coverage for citizens of the State of Nebraska.

The federal vision for the Exchange is to reduce the number of uninsured individuals, provide a transparent marketplace, conduct consumer education, and assist individuals in gaining access to insurance affordability programs, premium assistance tax credits, and cost-sharing reductions.

The State of Nebraska, Department of Insurance (NDOI) is issuing a Request for Proposal (RFP), for the purpose of selecting a qualified contractor to provide services, technical solutions, and operational support for the State of Nebraska Health Insurance Exchange to be administered NDOI.

Nebraska has completed the preliminary design phase of establishing a State-based Exchange and has a vision to develop a web-based solution that can be accessed by external customers and stakeholders on a 24 hour/7 days a week basis. Stakeholders include individual applicants/enrollees, employers, brokers, navigators, and issuers. Nebraska's Exchange system will provide a single point of access to multiple doorways based on an individual's eligibility. Nebraska has determined that the optimal strategy is one that allows the two organizations (e.g., Medicaid and Exchange) to develop and deploy their systems as independently as possible while ensuring proper data integration and consistency of user experience. Under this model, the Exchange IT systems are deployed independently from Medicaid's eligibility and enrollment and web portal systems. Further details will follow in this request.

NDOI is seeking proposals from qualified bidders to design, develop and implement a Health Insurance Exchange system which combines the Individual Exchange and the Small Business Health Options Program (SHOP) Exchange into one Exchange. The Exchange will facilitate access to affordable health insurance coverage for all Nebraska citizens in compliance with the mandates required within the Patient Protection and Affordable Care Act (PPACA).

If you want more detail on any area of the narrative, please see attached consultant PCG's Health Insurance Exchange Planning - Technology Plan (Oct 2011) and Concept of Operations Plan. The costs referenced in PCG's Technology Plan report are not accurate due to the length of time since it was prepared, the shortened time line, Supreme Court Ruling, and US-HHS guideline and regulation changes since October of 2011.

### **Attachments:**

Health\_Insurance\_Exchange\_Planning - Technology Plan.pdf  
NE HIX CONOPs v1-31.pdf

### **GOALS, OBJECTIVES, AND OUTCOMES (15 PTS):**

Major goals for the Exchange are to increase access to quality health plans and to reduce the number of uninsured individuals in Nebraska.

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The Exchange must be a transparent marketplace that simply and seamlessly:

- Directs consumers to the appropriate Qualified Health Plans (QHPs) including Dental Plans
- Allows consumers to apply for QHPs
- Determines and allows consumers to apply for subsidies
- Enrolls consumers in QHPs selected

The Nebraska Exchange will be designed, developed and implemented in a manner that will leverage, when possible, its existing infrastructure. Leveraging existing infrastructure and maximizing interoperability will minimize Nebraska's ongoing operational costs. This interoperability will allow the Exchange to maintain financial sustainability after federal funding changes in 2015. The selected vendor will need to provide a web portal solution for the delivery of Exchange functionality. The web portal should allow user based access for consumers, employers, navigator/assisters, agent/brokers, and exchange staff allowing access specific to their responsibilities. The Exchange will maintain security over private information and comply with Health Insurance Portability and Accountability Act (HIPAA).

The project measurements and assessments will be defined in the contract with the chosen vendor. This contract is being developed by a hired consulting group and independent of the chosen vendor of this project. A separate RFP will be issued for an Independent Validation and Verification vendor to make sure all areas of the contract with project vendor are met and satisfied.

## **PROJECT JUSTIFICATION / BUSINESS CASE (25 PTS):**

The purpose of this project is to procure a shared services configurable solution for the implementation of a fully functional Health Insurance Exchange by October 1, 2013. The Exchange system is a web-based solution that can be accessed by external customers and stakeholders on a 24 hour/7 days a week basis. Stakeholders include individual applicants/enrollees, employers, brokers, navigators, and issuers. This project will provide the opportunity for individual and employer enrollees seeking health insurance to find a qualified health plan from an insurer and determine if the enrollee qualifies for subsidized health insurance.

The options are for a federal based, a partnership (federal/state), or a state based exchange. The preferred option is a state based exchange, with a partnership next, and the federal based exchange as the least preferred. The state based option is the most robust, and the other two options are subsets of the state based option.

The Nebraska Exchange project is a federally mandated project as the result of the Patient Protection and Affordable Care Act of 2010 (PPACA).

## **TECHNICAL IMPACT (20 PTS):**

The project will try to provide enhancements to existing, replace outdated, and additional technology and solutions whenever possible and feasible. This project will require additional hardware, software, and communications capabilities. The details of these capabilities are not available until the vendor is selected. There are numerous possibilities to provide a solution for this project, and until we select the vendor, we will not know what the technical elements for the project are.

## **Reliability**

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The system will include full redundancy at all physical layers, including network (routers, load balancers), web servers, application servers, and database servers. The system will provide the capability to be backed up to a remote site that is separate and distinct from primary hosting facility within the Recovery Time Objective (RTO) defined by the Exchange. The system will be built upon an infrastructure that is easily upgradable through patches and point releases, including the upgrading of the Exchange software and all prerequisite infrastructure software and the application of data migration or update scripts.

## Security

The Exchange solution must allow the implementation, management and monitoring of the following security and compliance policies:

- Health Insurance Portability and Accountability Act (HIPAA)
- Health Information Technology for Economic and Clinical Health Act (HITECH) of 1996
- Privacy Act of 1974
- Patient Protection and Affordable Care Act (ACA) of 2010, Section 1561 Recommendations
- Safeguarding and Protecting Tax Returns and Return Information (26 U. S. C. 6130 and related provisions)
- Nebraska Information Technology Commission (NITC) Standards and Guidelines
- CMS's *Harmonized Security and Privacy Framework – Exchange TRA Supplement*
- The Exchange solution must implement a security architecture based on MITA 3.0 Security and Privacy model, including the following security architectural elements

The Security Plan include oversight of Exchange information resources and infrastructure, including electronic and non-electronic processes and data, network and computing utilities, personnel and all Exchange facilities.

The Security Report will document all security incidents (potential or actual) of sufficient severity and their time of identification.

## Scalability

- The Bidder will provide architecture diagrams or other documentation that demonstrates that the host environment has the ability to scale while maintaining adequate performance, is secure, and is sufficiently fault-tolerant.
- The Bidder will describe how its solution meets the CMS growth projections including allowance for future interfaces not defined within the requirements of this RFP.
- The Bidder will describe any upper limits to the solution's performance and scalability. The description should include sufficient data to allow the Exchange to determine the limitations, at a minimum, by user accounts and transactions, peak period processing, and what actions are required to upgrade the solution to meet future needs.
- The Bidder shall provide an overview of the internal operations relative to operating and maintaining the solution, including which party is responsible for each of the operational activities. If the Bidder is proposing uses the services of subcontractors or third party vendors to hosting of the solution, the Bidder shall describe how the Bidder ensures the third party stays current on appropriate evidence of having implemented a "standard enterprise operational framework".

## PRELIMINARY PLAN FOR IMPLEMENTATION (10 PTS):

The current plan is to announce the RFP on September 14, 2012 with opening of proposals 30 days later. Vendor(s) will be selected after the group of vendor finalists presents their solutions to an evaluation team.

The major milestones are to have a complete system implemented for the Nebraska for healthcare insurance exchange on October 1, 2013. The details of the timeline will be provided by the vendor selected from the RFP.

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The Training Plan describes how the Bidder plans to train the business, help desk, and technical Exchange personnel on how to operate and maintain the Exchange within the boundaries of the Exchange's responsibilities.

The Bidder must develop a training curriculum based and segmented toward specific security levels and role-based groups. The Bidder must develop all initial and ongoing training documentation and training curriculum for technical, Exchange, and business personnel.

Additionally, the Exchange Solution Bidder will be responsible for developing a Training Plan for Exchange Operations and Maintenance phase. The following areas will be addressed in the Training Plan:

- Training Needs by Position: For each position identified collaboratively with the Exchange, identify the training need and source or approach to acquiring the training.
- Applicable Training Tools and Methods: Identify and describe the tools and methods to be employed in the personnel training process.
- Trainer Roles and Responsibilities: Identify: 1) personnel and their responsibilities for developing and implementing the training, development, and distribution of instructional materials, etc.; 2) person(s) and organization(s) that will conduct the training; and 3) any other groups who may serve as consultants, such as members of the development team, experienced users, etc.
- Training Evaluation: Describe how training evaluation will be performed and how feedback will be elicited from personnel to ensure that training objectives were met (e.g., evaluation tools, forms, etc.).
- Training Development Schedule: Provide a schedule of training activities to be accomplished in accordance with the Training Plan, which may or may not include actual course information.
- Monitoring and Reporting: Describe how training registration and training completion will be monitored and tracked.

## **RISK ASSESSMENT (10 PTS):**

The major risks facing the procurement and deployment of the Exchange IT systems include the following:

- The tight timelines for Exchange certification and initial enrollment defined by the ACA and Federal regulations make proper procurement and testing time difficult at best and leave little room for error and correction of those errors if any.
- The "go-live" date is immovable due to the federal statute. The release of regulations which effect business process flow for the IT project have made it extremely difficult for the procurement of an IT solution. Every regulation release, every piece of guidance to those regulations and every interpretation of the regulations make the process of procurement extremely difficult. The adjustment of the IT system, once procured, to any new rules or adjustment of rules may also be difficult as well with the current deadlines as set forth by the ACA.
- In the wake of the Supreme Court decision upholding the ACA, CMS and CCIIO have been delayed in releasing post-decision guidance to the states, leaving uncertain multiple key issues that may change the design of the business processes and IT systems necessary to support the Exchange.

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- The Federal Department of Health and Human Services has announced that additional regulations will be published at the end of the summer of 2012, which may introduce new business and systems requirements late in the Nebraska design and procurement process.
- Dozens of states are engaging in Exchange implementations at the same time, which will likely create a shortage of qualified vendor resources to deliver the system implementations.
- Many of the systems and services with which the Exchange IT systems have not yet been built and, in some cases, are not even known at this stage, making integration requirements difficult to define.
- The Exchange implementation has dependencies on many systems and processes outside of its control, including the Federal Data Hub, other Federal systems, and the SERFF plan management system. Delays in the timeline for deploying these systems could create delays in the Exchange IT system implementation.
- The Nebraska Medicaid non-MAGI eligibility and enrollment systems for the aged, blind, and disabled populations are in the process of redesign and updates, creating both a development dependency and also leaving uncertain the details of data exchange.

14. Identify strategies which have been developed to minimize risks.

- The primary strategy is to learn from states that are further along in this process. To select a vendor that already has experience in the development of this solution for another state.
- The Exchange team meets weekly with federal and Nebraska HHS to make sure we have the latest information, and troubleshoot potential roadblocks as we discover them.
- The Exchange should minimize implementation risk by selecting vendors with a proven track record in the health insurance and state government market and high likelihood of success.
- The Exchange should seek a reliable, proven commercial-off-the-shelf (COTS) solution that is in production with multiple other customers (either in the state Exchange space or related health insurance industries).

## **FINANCIAL ANALYSIS AND BUDGET (20 PTS):**

The financial information submitted is based on information from RFIs received in early May of 2012. There have been some significant changes since then and, as a result of these changes, the accuracy of the information in the RFIs is less accurate today. The Exchange team has revised these earlier estimates to the best of our ability, based on the information we have at the present time.

The cost for FY13 is in anticipation of the grant and will be as of January 1, 2013.

The costs in Future Add column are for projected hardware and software replacements through 2020.

**Nebraska Department of Insurance  
Exchange Planning Division**

**Patient Protection and Affordable Care  
Act –  
Nebraska Health Insurance  
Exchange Project (NE-HIX)**

**Concept of Operations  
(CONOPs)**

**Version:** 1.3

**Last Modified:** August 27, 2012

**Document Number:** <document's configuration item control number>

**Contract Number:** <current contract number of company maintaining document>



## APPROVALS

### Submitting Organization's Approving Authority:

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Signature	Printed Name	Date	Phone Number
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*Exchange – Project Manager*

### CMS' Approving Authority:

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Signature	Printed Name	Date	Phone Number
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*<Position Title> [e.g., <Contract or System Name> Government Task Leader]*

## REVISION HISTORY

<b>Version</b>	<b>Date</b>	<b>Organization/Point of Contact</b>	<b>Description of Changes</b>
1.0	Mar 15, 2012	NE-DOI HIX / Michael Sciullo	Baseline Version
1.1	Aug 10, 2012	Navigant Consulting / J. Azpeitia	Updated Draft
1.2	Aug 22, 2012	Navigant Consulting / J. Azpeitia	Updated Draft based on NDOI discussion and input
1.2	Aug 27, 2012	Navigant Consulting / C. Duva	Updated Draft

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*This project has significant operational impacts on all involved State agencies. Each of the agencies will need to initiate changes and additions to their existing operations to support the ACA requirements and for ensuring an efficient and proper implementation and operation of the NE-HIX solution. These state agencies are active participants in supporting and guiding the project.....* 33

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*This project has significant organizational impacts on all involved State agencies. The staffing and the allocation of staff time for many of the agencies will change to support the requirements analysis, development, testing, implementation and ongoing maintenance of this solution. The State workers will need to go through re-training and education on the ACA requirements and processes, as well as the new system features.....* 33

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## 1. INTRODUCTION

The Patient Protection and Affordable Care Act (PPACA) drastically changes the State of Nebraska's insurance and Medicaid programs specifically related to enrollment in public programs including subsidized health insurance plans on the Exchange and in terms of the state's IT infrastructure needed to support the eligibility and enrollment process. PPACA sets forth a vision that includes:

- A technology platform that supports a cutting edge consumer experience and provides shared services to the Exchange and the Nebraska Department of Health and Human Services (NE-DHHS).
- Seamless coordination and integration experience between Medicaid, CHIP and State Insurance Exchange.
- Direct communication, integration, and coordination between the Exchange and insurers, employers, brokers, and navigators.
- Multiple right doors for consumers to access insurance affordability programs.
- The ability for Nebraska's consumers to compare high quality health care plans with the federally mandated standardization.

Nebraska is starting its planning and design process and is working toward a high level IT architecture solution that meets PPACA guidelines in the form of multiple right doors through the Health Insurance Exchange and Medicaid agency. The goals for this solution focus on the following:

- Allow Nebraska consumers to access MAGI based eligibility for private insurance products, and MAGI based Medicaid categories via the Health Insurance Exchange web portal and NE-DHHS ACCESSNebraska portal.
- Plan and design a Health Insurance Exchange technical solution that allows Nebraskans to access, and facilitates their application of, MAGI based Medicaid and private health insurance products.
- Facilitation of this process includes using contemporary and cost effective technologies and models to provide the highest level of consumer service, efficiency, and quality outcomes.
- Leverage existing business processes, turn-key solutions, early innovator artifacts, and federal Exchange documents to aid in planning and designing Nebraska's Exchange.

## **2. REFERENCED DOCUMENTS**

Nebraska's Health Insurance Exchange Gap Analysis, Performed by Public Consulting Group (October 11 2011). This document is referenced as the Alternatives Analysis and can be found as an attachment.

Use Case Scenarios, completed by the NE-HIX team, is also an attached document.

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## **3. CURRENT SYSTEM**

Nebraska faces many challenges in developing and implementing a federally compliant and fully functional Health Insurance Exchange (HIX) solution by October 1<sup>st</sup>, 2013. Project timelines are very rigid, and therefore this project will require efficient coordination, as well as significant federal support and guidance. Nebraska realizes that our existing legacy systems are unable to support PPACA requirements. Therefore, Nebraska must procure and integrate capable and configurable solutions.

### **3.1 Functional Description**

The functional description of the current systems in Nebraska is described below:

- The eligibility for Medicaid categories, and all Supplemental Nutrition Assistance Program (SNAP), Temporary Assistance for Needy Families (TANF) and other human services programs are handled by the Nebraska Department of Health and Human Services (NE-DHHS).
- The eligibility for CHIP, Long Term Care and Aged, Blind or Disabled Medicaid categories are handled by NE-DHHS.
- The Nebraska Family Online Client User System (N-FOCUS) is the State's integrated eligibility and case management system, which integrates to Nebraska's Medical Management Information System (MMIS). This system is subject to change.
- ACCESSNebraska is the public facing front-end for N-FOCUS. Its web-based interface provides the public access to apply for public aid (multiple programs). Personal support provided by customer service representatives occurs through ACCESSNebraska.
- ACCESSNebraska and N-FOCUS are not currently integrated electronically, therefore eligibility workers rekey scanned online applications to initiate the eligibility and enrollment process.

- NE-DHHS operates four Call Centers that operate in conjunction with the ACCESSNebraska online portal for the applicants to apply, submit changes, and check their application status.

Nebraska's current systems do not meet federal PPACA requirements or satisfy CMS's vision of a streamlined approach guided by MITA principles.

The State's intent is for our proposed approach to meet PPACA requirements, and provide a manageable scope of work and streamlined and consumer friendly platform for private insurance products and MAGI based Medicaid enrollment and eligibility.

### 3.2 User Community Description

The current user community in Nebraska includes the following constituents:

- **Agents**
- **Consumers** – Individuals who apply for services for themselves and/or their families.
- **Community Groups (Assistors)** – Individuals who assist consumers in applying for services and who work in hospitals, clinics, Indian Health Services and other community based organizations.
- **DHHS State Workers** – State workers who determine eligibility for Medicaid, CHIP, Supplemental Nutrition Assistance Program (SNAP), Temporary Assistance for Needy Families (TANF) and other programs.
- **Brokers** – Individuals who will be able to help consumers or employers purchase health insurance or apply for advance payments of the premium tax credit and cost-sharing reductions for Qualified Health Plans.
- **Navigators** – Individuals or entities who will educate consumers about the Exchange and the health coverage options offered by the Exchange.

### 3.3 Technical Architecture

The current technical environment is developed, managed, and maintained by a combination of two organizations, NE-DHHS Information Systems & Technology (IS&T) and the State's Office of the Chief Information Officer (OCIO).

IS&T administers the NE-DHHS computer resources and provides support in such areas as: feasibility studies, system design and development, system maintenance, computer hardware/network acquisition, installation and maintenance, data processing operations,

and system project management. IS&T maintains the NE-DHHS' Help Desk, desktop support, Outlook email and Lotus Notes databases. It is responsible for application support of Nebraska DHHS applications, including those highlighted in this report: 1) the Medicaid Management Information System (MMIS), 2) the Nebraska Family Online Client User System (N-FOCUS) and 3) ACCESSNebraska. Over the past several years, IS&T's efforts have primarily focused on maintaining the NE-DHHS' legacy applications.

The OCIO administers the State's data center, data network, and telecommunications network. The NE-DHHS purchases staffing and computing resources from the OCIO, and collaborates with the OCIO to manage, operate and maintain the MMIS.

The IT applications that are maintained by IS&T in support of the NE-DHHS Division of Medicaid and Long-Term Care programs include:

- Nebraska Family Online Client User System (N-FOCUS) – Nebraska's integrated eligibility and case management system.
- ACCESSNebraska – Nebraska's public facing front-end for N-FOCUS
- Medicaid Management Information System (MMIS) – Nebraska's Medicaid Claims Processing system

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#### **4. GOALS, OBJECTIVES, AND RATIONALE FOR NEW OR SIGNIFICANTLY MODIFIED SYSTEM**

Nebraska's goal is to reach certification requirements by utilizing a MAGI based rules system to determine eligibility for MAGI applicable Medicaid determinations. Our proposed solution will have difficulty leveraging existing assets or modifying them to be compliant with the ACA requirements. Even though Nebraska has some minor assets that can be leveraged, the existing system components will need to go through significant modifications to meet the ACA requirements and, in most cases, new solutions and services will need to be either built or purchased. Therefore, a new system will be procured. The Exchange's isolated business rules engine will be a deployed shared service between Medicaid and the Exchange.



## **4.1 Project Purpose**

The purpose of this project is to procure a shared services configurable solution for the implementation of a fully functional Health Insurance Exchange by October 1, 2013.

## **4.2 System Goals and Objectives**

Nebraska will procure a shared services configurable solution, such as an eligibility determination system, noticing, user accounts, verification, and appeals. A plan management selection portal will also provide seamless interaction between the consumer with the Exchange, state eligibility systems, the federal and state data warehouse, other systems and Qualified Health Plans (QHPs).

## **4.3 Proposed System**

The vision for the Exchange system is a web-based solution that can be accessed by external customers and stakeholders on a 24 hour/7 days a week basis. Stakeholders include individual applicants/enrollees, employers, brokers, agents, assisters, navigators, and issuers.

Nebraska's Exchange system will allow for both the self-service for private insurance products and MAGI based Medicaid and assisted enrollments. Assisted enrollments will allow a range of qualified enrollers to help the consumers apply, per federal and state regulatory requirements.

The eligibility for Non-MAGI Medicaid categories, and all SNAP, TANF and other human services programs are handled by the Nebraska Department of Health and Human Services' integrated eligibility determination system.

The proposed system will fundamentally change Nebraska's IT infrastructure. As noted, Nebraska will procure other solutions for the below functions in order to achieve certification and compliance.

- Eligibility (Shared Service)
- Enrollment
- Plan Management [System for Electronic Rate and Form Filing (SERFF)]
- Plan Selection

- Small Business Health Options Program (SHOP) and support services
- Consumer assistance and support services (Shared Service)
- Notices Management and support services (Shared Service)
- Appeals, Grievances and Complaints Management and support services (Shared Service)
- Financial Management and support services
- Audit and Compliance and support services (Shared Service)
- Reporting and Data Warehouse functions and support services (Shared Service)
- Training and development services

The procured solutions will support the above business functions of Nebraska's Individual and Small Business Health Options Program (SHOP) Exchange, while providing shared services to NE-DHHS.

#### **4.3.1 System Scope**

The overall system scope is a web-based system that provides portals for consumers, small employers and their employees, navigators, assisters, community groups, state workers, brokers and agents, and qualified health plans. The NE-HIX will provide full capabilities across this spectrum of portals to provide the business processes noted below.

The NE-HIX will also provide the functionality allowing consumers and employees the capability to apply for health insurance and/or public benefits including Medicaid and APTC for private insurance plans. To accomplish this, the NE-HIX will share its rules engine and additional services with NE-DHHS (per Nebraska's Multiple Right Door approach) and integrate with a shared database, and the Federal Hub.

#### **4.3.2 Business Processes Supported**

The core business processes that will be supported in the proposed system are as follows:

- Eligibility and Enrollment - Individual
- Eligibility and Enrollment - SHOP
- Consumer Assistance
- Plan Management

- Financial Management
- Audit and Compliance
- Reporting and Data Warehouse Functions

### **4.3.3 High Level Functional Requirements**

The high level functional requirements for the proposed system are described below:

- Integrate with State and Private Insurance Systems
- Interface with State and Federal Health Insurance Portals and data hubs and other verification systems
- Integrate with Plan Management (SERFF) which will be secured through National Association of Insurance Commissioners
- Integrate with Plan Selection, SHOP, Financial Management, Appeals Management (shared service) component solutions that will be procured through competitive bids
- Integrate with Qualified Health Plans (QHPs)
- Support management of any applicable data (Data Warehouse)
- Provide support for customer service support systems and processes
- Utilize customer feedback surveys, notices, help language, live chat, email and texting
- Provide a State Worker Portal to support the completion of applications for public benefits, renewals, and updates
- Provide Navigator, Broker and Agent Portals to support the completion of applications, renewals, and updates
- Provide a Qualified Health Plan Portal and/or integration to link current provider lists
- Provide an Employer portal so employers can access SHOP and keep rosters current

### **4.3.4 Summary of Changes**

As described above, there are not many assets that can be leveraged in Nebraska. Many of the existing system features and functionalities will need to be completely replaced to accommodate the ACA requirements. At the same time new solutions and services will need to be implemented to fill in the gaps. Summarized below are some potential new solutions and services that will need to be implemented:

### **New Solutions and Services**

- NDOI Shared Rules Engine to accommodate MAGI and other ACA rules
- Eligibility & Enrollment solution and support services
- SHOP solution and support services
- Plan Selection solution
- Plan Management solution
- Consumer Support solution and support services
- Financial Management solution and support services
- Notices Management solution and support services
- Appeals, Grievances and Complaints Management solution
- Customer feedback and support system
- e-Learning solution and support services
- Integration with Federal Data Services Hub
- Integration with the Federal Tax Credit Calculator and Cost Sharing
- Data Management solution and support services
- Data Warehousing and Reporting solution and support services
- NE-HIX Workflow
- E-mail and text messaging framework

---

## **5. SCENARIOS ANALYSIS**

The NE-HIX team has completed the process of developing business and functional use case scenarios (please see Attachment B of this document) as a part of the requirements analysis and has finalized the business process models. The state started the process with the blueprints provided by CMS and CCIIO and customized them for Nebraska. Details were expanded to ensure that the use cases reflect the breadth and complexity of the NE-HIX process. Many of these scenarios are used to guide the requirements and system design and development process. Any documents submitted to CMS are subject to change as the state reserves the right to make modifications based on internal and external stakeholder review. Finalized business process flows will be submitted on November 16, 2012 as part of the Blueprint application submission. Once the documents are completed, the State will post them to CALT.

---

## 6. FACTORS INFLUENCING TECHNICAL DESIGN

High level factors that will influence the technical design of the system are:

- IT Guidance 1.0, 2.0 & 3.0 from CMS
- Seven Conditions and Standards
- MITA framework and guidelines

### 6.1 Relevant Standards

Relevant standards that will be addressed during the design of the NE-HIX and its supporting solutions include:

- All applicable Nebraska state laws and regulations
- Section 1561 standards
- Security, privacy and operational standards required by HIPAA, HITECH, NIST, and FIPS standards
- NIST standards for Disaster recovery and Continuity of Operations Program (COOP)  
([http://csrc.nist.gov/publications/nistpubs/800-34-rev1/sp800-34-rev1\\_errata-Nov11-2010.pdf](http://csrc.nist.gov/publications/nistpubs/800-34-rev1/sp800-34-rev1_errata-Nov11-2010.pdf))
- ADA Section 508 and W3C standards for disability support
- Limited English Proficiency (LEP) standards

### 6.2 Assumptions and Dependencies

Nebraska's work on the NE-HIX assumes that CMS will provide sufficient guidance and support so that Nebraska can make decisions and build capability for the NE-HIX in time for an October 1, 2013 start up. Additional assumptions include:

- While existing State systems and processes will be leveraged where feasible, the Exchange will procure its own IT systems as necessary to support its business operations.

- The procurement will be based upon the business and technical requirements known today to meet the ACA and current Federal HHS regulations.
- While we may leverage existing facilities or equipment, the Exchange will operate a separate call center for consumer assistance that will be staffed by the Exchange and not by other agencies.
- The Exchange will be hosted at the NDOI. The Director of Insurance is tasked with the oversight of a potential state based exchange.
- Project has support from the project sponsor, stakeholders, and all involved divisions/departments.
- A third party vendor may administer the project management for NE-HIX development.
- Decisions will be made in a timely fashion, based on information known at the time of the decision.
- Decisions will be based on sound business and technical analysis.
- NDOI will be responsible for managing business related project activities such as business case, business scope, business objectives, business requirements, business rules, and user acceptance testing for the Exchange.
- NE-DHHS will be responsible for managing business related project activities such as business case, business scope, business objectives, business requirements, business rules, and user acceptance testing for Medicaid.
- NDOI will be responsible for managing its plan and for all IT functions, such as technical requirements, system design, code development, unit/system/regression testing, infrastructure development, IT implementation, and IT training for the Exchange.
- The Federal Government will provide timely and relevant guidance that will not delay or impede the progress of the creation of an exchange.
- Federal Government will provide on-going refinement of guidance once released.
- Adequate federal / state funding will be available and will cover costs to achieve the project scope.
- Agency partners will provide necessary resources when needed.
- Strong possibility that significant changes in federal or state law, court rulings, policy or regulation will materially impact the project.
- Internal / external suppliers and integrators will provide deliverables in a timely manner.

There are several dependencies for this project; many of them are related to Federal rules, guidelines and services. These dependencies are listed below:

- Federal rules around MAGI and other ACA rules
- APTC guidance and details in a State-Based Exchange
- Federal Data Services Hub

- Federal Calculator for Tax Credits and Cost Sharing Reduction
- Federal standards such as NIEM
- Federal guidelines on areas such as Risk Adjustment, Identity Resolution and more
- SERFF
- State Legislation

### **6.3 Constraints**

The following are some of the high level project constraints:

- The “go-live” date is immovable due to the federal statute.
- Initial system procurement and deployment can be funded via Federal Exchange Establishment Grants, but the ongoing support costs of the systems must be fully-funded by the Exchange’s operating funds.
- First year of operational testing will be funded by Federal Exchange Establishment Grants.
- Availability of CCIO Federal Solutions
- Unknowns around the Federal Rules, Federal Data Services Hub, Federal Calculator for Tax Credits and Cost Sharing Reduction, NIEM Standard.
- Limited verification data to be provided by IRS, combined with onerous security requirements.
- Pending guidelines on Identity Resolution
- Unknowns around specifics of the Risk Adjustment, Reinsurance and Risk Corridor programs and associated operations.
- Pending federal regulations, revised regulations or additional guidance or other program memoranda.
- Multiple layers of oversight which consume project leadership time.
- State Legislation
- Time and schedule
- Project complexity

### **6.4 Design Goals**

The following are some of the goals that will be considered during the design of NE-HIX and its supporting solutions:

- Provide a first-class customer experience for the residents of Nebraska
- Meet, or beat, the initial minimum requirements of the ACA
- Financially and operationally sustainable
- Service Oriented Architecture (SOA)
- System architecture based on open standards
- Flexible architecture that can easily incorporate change and new features
- Easily adaptable to new products and regulatory requirements
- Focus on reusable, reliable, and maintainable solutions that avoid the writing of custom code and the duplication of systems
- Design for maximum reusability
- Highly available and highly scalable architecture
- Ensure the security and privacy of the Exchange system and the data it contains
- Mitigate business continuity risks and support formal processes and best practices for disaster recovery, including automated fail over and horizontal and vertical scalability

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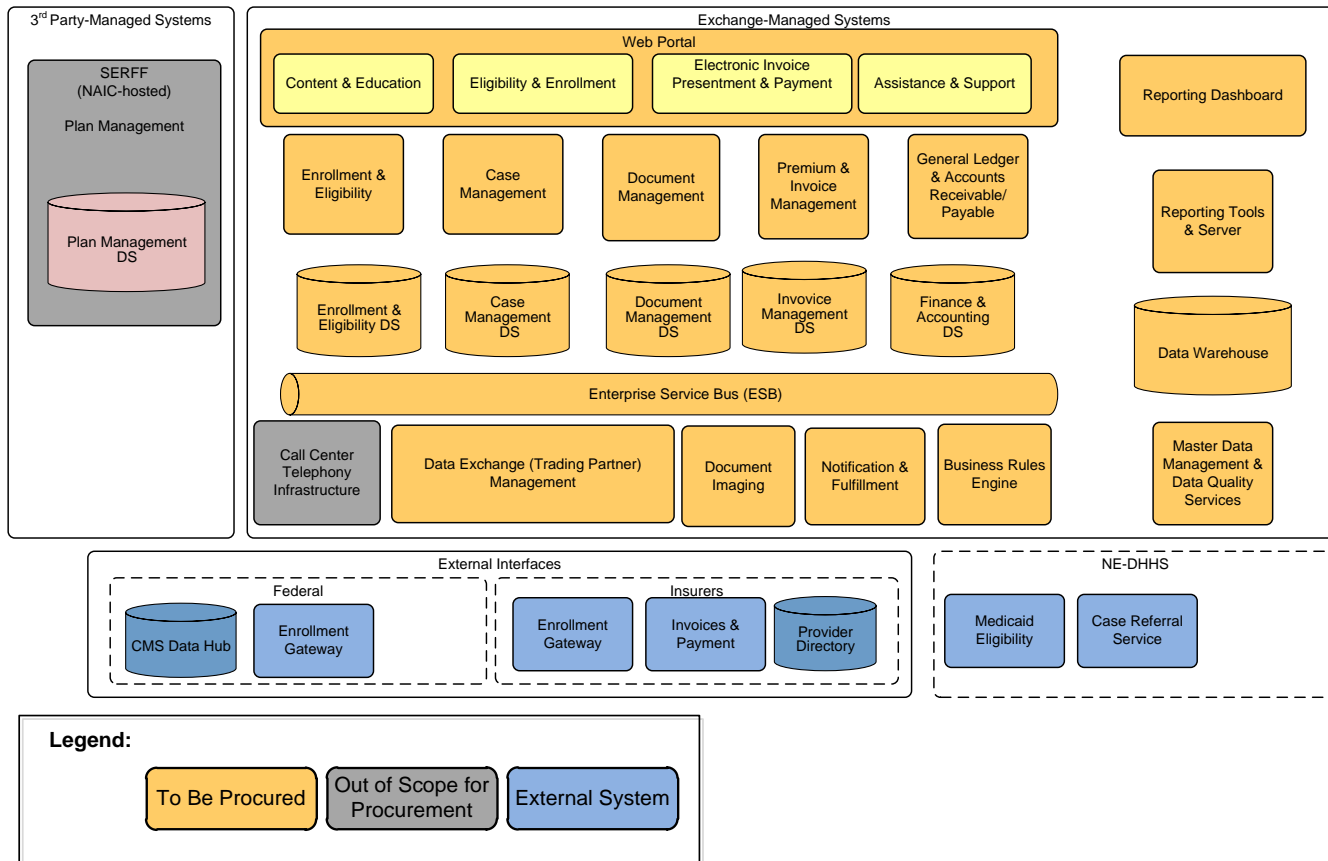
## **7. PROPOSED SYSTEM**

The core NE-HIX will provide full capabilities across this spectrum of portals to provide the business processes noted above. The NE-HIX will also provide configurable shared services so that consumers and employees can apply for health insurance and Medicaid.

### **7.1 Context Diagram**

The System Context Diagram for NE-HIX is presented below:





## 7.2 High-Level Operational Requirements and Characteristics

Some of the high level operational requirements and characteristics that will be considered while planning Nebraska’s integrated solution include:

- First Class Consumer Experience
- Consumer Mediated Approach
- Eligibility support and determinations
- Real Time Verification with Federal and State Systems
- Automated renewal process
- Reasonable compatibility and self-attestation
- Integrate with State and Private Insurance Systems
- Integrate with State and Federal Health Insurance Portals and data hubs
- Integrate with Plan Management (SERFF)
- Integrate with Qualified Health Plans (QHPs) and state eligibility systems
- Provide support for and integration with customer support systems and processes
- Provide a State Worker Portal to support the completion of applications for public benefits, renewals, and updates
- Provide a Community Assistor and Navigator, Broker and Agent Portals to support the completion of applications, renewals, and updates
- Provide a Qualified Health Plan Portal and/or integration to link current providers lists
- Provide an Employer portal so employers can access SHOP and keep rosters current
- HIPAA (5010), NIST, HITECH, and FIPS Compliance

### 7.2.1 User Community Description

User Group	Description / Expected Use of System	Type (Federal/State Employee, Contractor)	Geographic Location	Total Users	Concurrent Users
Consumer	This group will include individuals, families and small business employees who want to use NE-HIX for public benefits and private	Non Federal or State Employee or Contractor	Nebraska	Approximately 290,000 - 300,000	Analysis in Progress

Nebraska Department of Insurance - Health Benefits Exchange

<b>User Group</b>	<b>Description / Expected Use of System</b>	<b>Type (Federal/State Employee, Contractor)</b>	<b>Geographic Location</b>	<b>Total Users</b>	<b>Concurrent Users</b>
	insurance				
Community Assistor	Community Assistors who will be helping the consumers to apply	Non Federal or State Employee or Contractor	Nebraska	Analysis of Total Users in Progress	Analysis in Progress
Navigator	Navigators who will be helping the consumers to apply	Non Federal or State Employee. Will be contracted under the State's Navigator program	Nebraska	Analysis of Total Users in Progress	Analysis in Progress
Small Business	Employers who will be eligible as small business in Nebraska to purchase insurance for their employees	Non Federal or State Employee or Contractor	Nebraska	Analysis of Total Users in Progress	Analysis in Progress
State Worker	State Workers from participating State agencies who will work on the public benefits and/or private insurance areas	State Employee or Contractor	Nebraska	Analysis of Total Users in Progress	Analysis in Progress
Brokers and Agents	Brokers and Agents who may be helping consumers or employers purchase health insurance	Non Federal or State Employee or Contractor	Nebraska	Analysis of Total Users in Progress	Analysis in Progress

<b>User Group</b>	<b>Description / Expected Use of System</b>	<b>Type (Federal/State Employee, Contractor)</b>	<b>Geographic Location</b>	<b>Total Users</b>	<b>Concurrent Users</b>
Qualified Health Plan	Users from Health Plans who will offer their insurance plans in NE-HIX	Non Federal or State Employee or Contractor	Nebraska	Analysis of Total Users in Progress	Analysis in Progress

## 7.2.2 Non-Functional Requirements

The following are the non-functional requirements for this project:

- The enrollment management system must support the configuring of dozens of issuers and thousands of plans and enrollment transactions while still ensuring rapid system response times.
- Exchange systems managing credit card payments must be certified to meet PCI Compliance Level 4 standards
- All exchange of enrollment related information must conform to HIPAA security standards.

### 7.2.2.1 Security and Privacy Considerations

The eligibility, enrollment and other processes required by ACA will require NE-HIX to collect, store and share Personally Identifiable Information (PII) and Personal Health Information (PHI). Accordingly, NE-HIX will implement appropriate security and privacy controls. The integrated NE-HIX solution will be compliant with appropriate security and privacy guidelines. It will also be comply, as necessary, with the appropriate standards for Disaster Recovery and Continuation of Operations Program (COOP).

### 7.2.2.2 Volume and Performance Expectations

Based on the analysis conducted for the Exchange Planning Grant, Nebraska is expecting new consumers to be a part of the NE-HIX solution. See the tables below:

*Baseline Scenario: Separate Markets with Small Employer at 50, Estimated Covered Lives*

Year	Exchange Market			Outside Market		
	Individual	Small Group	Total	Individual	Small Group	Total
2014 <sup>‡</sup>	48,545	1,663	50,207	22,340	94,770	117,110
2015 <sup>‡</sup>	72,790	4,465	77,255	28,037	97,451	125,488
2016	106,129	14,180	120,309	35,410	148,640	184,049
2017	110,186	16,801	126,987	38,384	151,205	189,589
2018	110,967	16,920	127,887	38,656	152,276	190,932

*Baseline Scenario: Separate Markets with Small Employer at 100, Estimated Covered Lives*

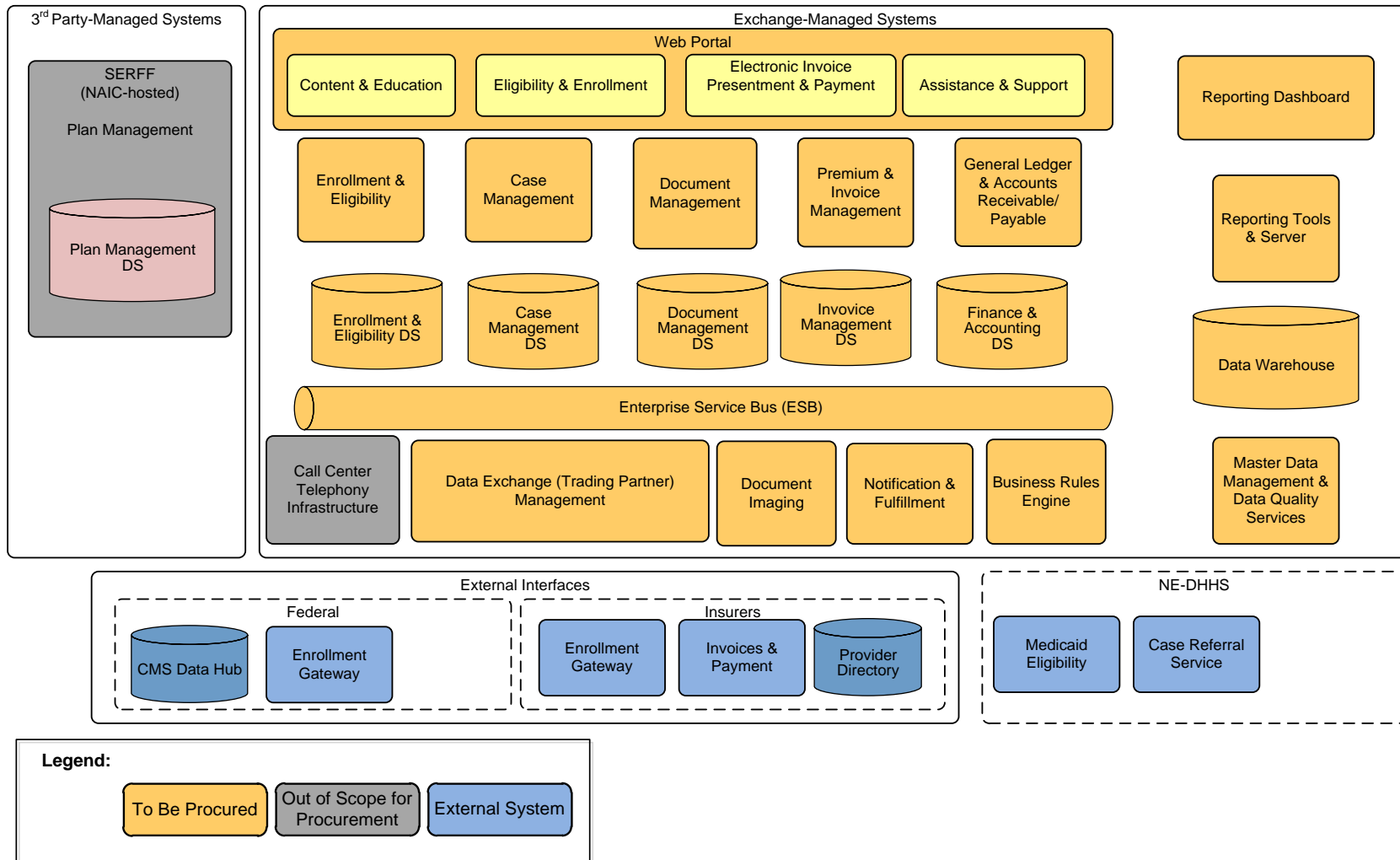
Year	Exchange Market			Outside Market		
	Individual	Small Group	Total	Individual	Small Group	Total
2014 <sup>‡</sup>	48,545	2,467	51,012	22,340	140,634	162,974
2015 <sup>‡</sup>	72,790	6,626	79,416	28,037	144,612	172,650
2016	106,129	14,180	120,309	35,410	148,640	184,049
2017	110,186	16,801	126,987	38,384	151,205	189,589
2018	110,967	16,920	127,887	38,656	152,276	190,932

<sup>‡</sup>The PPACA defines small employer to be those employers with up to 100 employees. States have the option for 2014 and 2015 to define small employer to be those with up to 50 employees.

### 7.3 High Level Architecture and Alternatives Analysis

The high level business architecture for the NE-HIX is presented below:

# Nebraska Department of Insurance - Health Benefits Exchange



The Alternatives Analysis is included as Attachment A of this document.

### 7.3.1 Application Architecture

The following table provides the application component and associated application architecture:

<b>Diagram ID</b>	<b>Application Component</b>	<b>Description (Business Process Supported, Purpose of Component)</b>	<b>Type (Identify both – (1) Operational or Analytical; (2) Batch or Online?)</b>	<b>Strategy (Build, Buy, Reuse, Rewrite)</b>
	Eligibility and Enrollment	Support eligibility and enrollment into Medicaid and QHPs	TBD	Procure
	State Worker View	Allow State Workers to process applications, determine eligibility (if required) and manage benefits (if required) for public and private benefits	TBD	Procure
	Plan Management	Management of the certification, recertification, decertification and compliance monitoring of qualified health plans that want to offer their plans in the NE-HIX.	TBD	Procure
	Plan Selection	The Plan Selection will allow consumers to search for public health plans (Medicaid and CHIP) and QHP (private health	TBD	Procure



<b>Diagram ID</b>	<b>Application Component</b>	<b>Description (Business Process Supported, Purpose of Component)</b>	<b>Type (Identify both – (1) Operational or Analytical; (2) Batch or Online?)</b>	<b>Strategy (Build, Buy, Reuse, Rewrite)</b>
		insurance) plans that are offered in the NE-HIX		
	SHOP	The SHOP business area assists “qualified” small employers with enrolling their employees in private health insurance plans	TBD	Procure
	Financial Management	The Financial Management business area deals with the administration and management of financial transactions that are related to the NE-HIX	TBD	Procure
	Consumer Support	The Consumer Support business area requires the NE-HIX to act as the first point of contact, and provide consumer support through multiple channels and mechanisms	TBD	Procure
	Appeals, Complaints and Grievances	The Complaints, Grievances and Appeals management business area establishes a process for	TBD	Procure

<b>Diagram ID</b>	<b>Application Component</b>	<b>Description (Business Process Supported, Purpose of Component)</b>	<b>Type (Identify both – (1) Operational or Analytical; (2) Batch or Online?)</b>	<b>Strategy (Build, Buy, Reuse, Rewrite)</b>
	Management	customers to submit their complaints, grievances or appeals regarding eligibility decisions and other activities related to the NE-HIX		
	Notices Management	Notices Management will allow inbound and outbound notifications between NE-HIX and the customers	TBD	Procure
	Document Management	Document Management will provide submission, storage, management, retrieval and tracking of electronic documents, images. Audio and video files	TBD	Procure
	Outreach and Education (e-Learning and more)	This feature will deal with the outreach and education of the users on the functions, features and programs of NE-HIX	TBD	Procure
	Data Management	The Data Management solution	TBD	Procure

<b>Diagram ID</b>	<b>Application Component</b>	<b>Description (Business Process Supported, Purpose of Component)</b>	<b>Type (Identify both – (1) Operational or Analytical; (2) Batch or Online?)</b>	<b>Strategy (Build, Buy, Reuse, Rewrite)</b>
		will enable the NE-HIX to uniquely identify data records from multiple systems and provide a single view of data records		
	Reporting and Data Warehouse	The Data Warehouse solution will allow the State to have the required business intelligence for analyzing the operational impacts and improvements of the NE-HIX as well as satisfying the various stakeholders (Federal and State) reporting requirements	TBD	Procure
	NIEM Translator	The NIEM translator will allow NE-HIX to translate the data that will be exchanged with HHS and the Federal services (e.g. Federal Data Hub, Federal Calculator etc.) into a NIEM format	TBD	Procure

### 7.3.2 Information Architecture

<b>Diagram ID</b>	<b>Conceptual Information Entity</b>	<b>Description</b>	<b>Type of Data Store (Transactional, Analytical)</b>	<b>System of Record? (Does this system or another system serve as system or record for information?)</b>	<b>Data Acquisition Approach (e.g., User Data Entry, Interface)</b>
	Eligibility and Enrollment Data	Information to support the eligibility and enrollment for MAGI, QHPs and Other benefits supported in NE-HIX	Analytical and Transactional	Yes	User Data Entry, Interface with Federal and State Data Hubs, other state agency data
	SHOP Data	Information about the small business and their employees to support the SHOP process	Transactional	Yes	User Data Entry
	Plan Management Data	Data from the Health Plans to support Plan Management	Analytical	Yes	Interface
	Plan Selection Data	Information about the QHPs from the Health Plans to support Plan Selection	Analytical	Yes	Interface
	Financial	Data to support the Financial	Transactional	Yes	Interface

<b>Diagram ID</b>	<b>Conceptual Information Entity</b>	<b>Description</b>	<b>Type of Data Store (Transactional, Analytical)</b>	<b>System of Record? (Does this system or another system serve as system or record for information?)</b>	<b>Data Acquisition Approach (e.g., User Data Entry, Interface)</b>
	Management Data	Management for NE-HIX			
	Reporting Data	Data to support Reporting	Transactional	Other systems above	Interface

### 7.3.3 Interface Architecture

Diagram ID	Information Shared	Interfacing Application	Purpose	Platforms Involved	Inbound or Outbound?	Batch or Near Real Time?	Data Stored Persistently? (Will the proposed system stored inbound data from the external system persistently?)
	Verification Information for a Consumer	Federal Data Services Hub	Real time verification	TBD	Both	Real Time	TBD
	Verification Information for a SHOP	Federal Data Services Hub	Realtime verification	TBD	Both	Real Time	TBD
	Data required to calculate Tax Credit and Cost Sharing Reduction	TBD	Information collection	TBD	Both	Real Time	TBD
	Eligibility and Enrollment Data	TBD	Information collection	TBD	Both	Real Time	TBD

<b>Diagram ID</b>	<b>Information Shared</b>	<b>Interfacing Application</b>	<b>Purpose</b>	<b>Platforms Involved</b>	<b>Inbound or Outbound?</b>	<b>Batch or Near Real Time?</b>	<b>Data Stored Persistently? (Will the proposed system stored inbound data from the external system persistently?)</b>
	for public benefits						
	Eligibility and Enrollment Data for QHPs	TBD	Information collection	TBD	Both	Real Time	TBD
	Plan Management Data	SERFF	Information collection	TBD	Both	Real Time	No

### **7.3.4 Technology Architecture**

The technology architecture for NE-HIX will be a Service Oriented Architecture that will follow the MITA 3.0 guidelines. The technology architecture of the solutions being procured to augment the core NE-HIX are not yet known, but are required to be provided so that they can be integrated with the core NE-HIX technical architecture.

Some of the high level targeted features of the core NE-HIX architecture are described below:

- System architecture based on open standards
- Reusable services and system components
- Flexible architecture that can easily incorporate change and new features

#### **7.3.4.1 Platform**

- Currently Unknown

#### **7.3.4.2 System Hosting**

- Currently Unknown

#### **7.3.4.3 Connectivity Requirements**

- Currently Unknown

#### **7.3.4.4 Modes of Operation**

- Currently Unknown

### **7.3.5 Security and Privacy Architecture**

- Currently Unknown

#### **7.3.5.1 Authentication**

- Currently unknown

#### **7.3.5.2 Authorization**

- Currently unknown



### **7.3.5.3 Encryption**

- Currently unknown
- 

## **8. ANALYSIS OF THE PROPOSED SYSTEM**

Summarized below is the analysis of the proposed system:

### **8.1 Impact Analysis**

#### **8.1.1 Operational Impacts**

This project has significant operational impacts on all involved State agencies. Each of the agencies will need to initiate changes and additions to their existing operations to support the ACA requirements and for ensuring an efficient and proper implementation and operation of the NE-HIX solution. These state agencies are active participants in supporting and guiding the project.

#### **8.1.2 Organizational Impacts**

This project has significant organizational impacts on all involved State agencies. The staffing and the allocation of staff time for many of the agencies will change to support the requirements analysis, development, testing, implementation and ongoing maintenance of this solution. The State workers will need to go through re-training and education on the ACA requirements and processes, as well as the new system features.

#### **8.1.3 Risks**

Summarized below are some of the major risks that have been identified to date for this project:

- Schedule/Timeline
- State Legislation
- Procurement
- Unknowns around the Federal Rules, Federal Data Services Hub, NIEM, Federal Calculator for Tax Credits and Cost Sharing Reduction
- Limited verification data elements to be provided by IRS, combined with onerous security requirements
- Pending guidelines on Identity Resolution
- Unknowns around specifics on the Risk Adjustment, Reinsurance and Risk Corridor programs

- Ongoing funding risks for supporting development and operations of the NE-HIX

## **8.2 Issues to Resolve**

The majority of the risks mentioned above remain as unresolved issues at this point.

## **8.3 Critical Success Factors for Remainder of Project**

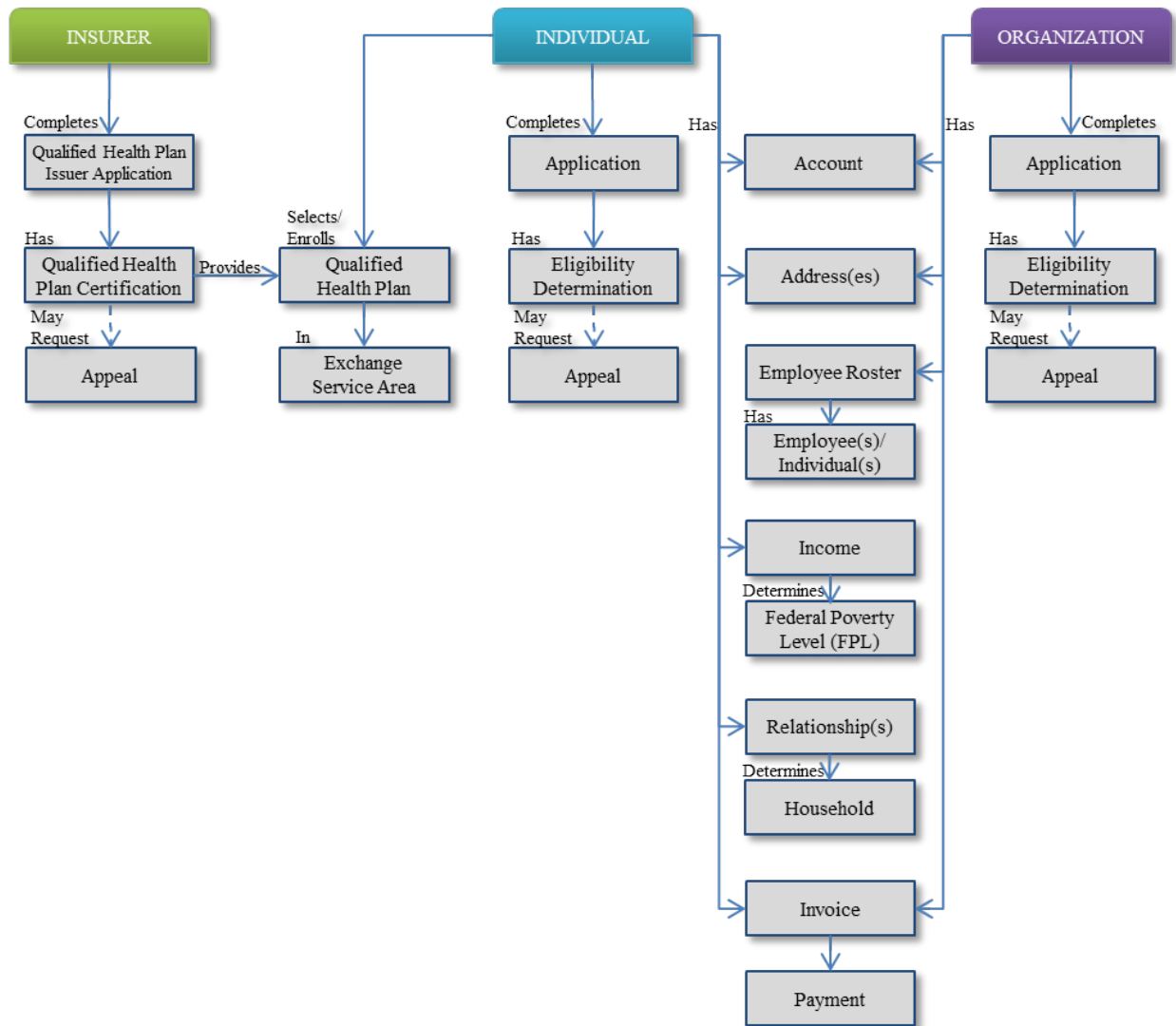
Some of the critical success factors for the remainder of the project are listed below:

- Successful completion of the Establishment reviews
- Successful completion of the IAPD
- On time solicitation award
- Successful and timely completion of the requirements analysis
- Successful and timely completion of the system and interface designs
- Successful and timely completion of the system development and integration tasks
- Successful completion of the CMS certification of the Exchange
- Successful and timely completion of the User Acceptance Testing (UAT)
- Successful completion of the Training and Outreach
- Go Live

## 9. GLOSSARY

<b>ACCESS NEBRASKA</b>	Over Arching System Architecture for Current Public Assistance Programs
<b>CMS</b>	Centers for Medicare and Medicaid Services
<b>HIX</b>	Health Insurance Exchange
<b>IS&amp;T</b>	Information Systems & Technology
<b>MMIS</b>	Medical Management Information System
<b>N-FOCUS</b>	Nebraska Family Online Client User System (Nebraska's Current Eligibility System)
<b>NDOI</b>	Nebraska Department of Insurance
<b>NE-DHHS</b>	Nebraska Department of Health and Human Services
<b>NE-HIX</b>	Nebraska Health Insurance Exchange
<b>OCIO</b>	Office of the Chief Information Officer
<b>PPACA</b>	Patient Protection and Affordable Care Act
<b>QHP</b>	Qualified Health Plan
<b>SERFF</b>	System for Electronic Rate and Form Filing
<b>SHOP</b>	Small Business Health Options Program

## 10. APPENDIX A: CONCEPTUAL INFORMATION MODEL



# **State of Nebraska Department of Insurance**

**Health Insurance Exchange  
Information Technology Roadmap  
Final Report**

**October 11, 2011**

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## 1. Executive Summary

The Patient Protection and Affordable Care Act of 2010<sup>1</sup> (hereinafter the ACA) provides for the creation of state-based Health Benefit Exchanges that will allow consumers to access and evaluate plans from commercial insurers and to apply for health subsidy programs that best meet their needs for coverage effective January 2014. In so doing, the federal government expects states to use a “single, streamlined form that: may be used [by individuals] to apply for all applicable State health subsidy programs within the State; may be filed online, in person, by mail, or by telephone; may be filed with an Exchange or with State officials operating one of the other applicable State health subsidy programs; and is structured to maximize an applicant’s ability to complete the form satisfactorily, taking into account the characteristics of individuals who qualify for applicable State health subsidy programs.”

States have the option of leveraging a federal Health Insurance Exchange (Exchange), joining with other states to offer a regional Exchange, building a state-based Exchange, or creating multiple Exchanges within a single state to implement this new law. The Nebraska Department of Insurance (NDOI) awarded a contract to Public Consulting Group, Inc. (PCG) to determine the financial feasibility of creating a state-based Exchange, focusing specifically on what will be required to streamline the eligibility and enrollment processes for publicly subsidized health coverage programs. This information, considered in tandem with other planning work that Nebraska is pursuing, will help to inform the State’s decision-making process and support its efforts to request enhanced federal funding through the federal grant making process should the State decide to move forward.

To conduct this analysis, the PCG project team reviewed materials that document the Nebraska Department of Health and Human Services’ (DHHS’) current program and technical environments. The project team also met with key staff members to better understand the existing information technology (IT) systems that could be leveraged to meet the requirements of the ACA and to identify alternatives that the State could pursue. PCG also looked at state initiatives that might impact the Nebraska Exchange planning process and identified recent activities in the Early Innovator states to identify potential leveraging opportunities.

When this project was conducted, the health care reform environment was very fluid. There were many unknowns in terms of services that would be provided at the federal level and leveraged by the states. Regulations were in the making. New rules to streamline the eligibility determination process for all of Medicaid,

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<sup>1</sup> Public Law 111-149, Patient Protection and Affordable Care Act, March 23, 2010, 124 Stat. 119, <http://www.gpo.gov/fdsys/pkg/PLAW-111publ148/content-detail.html>.



not just those for the expanded populations, were pending. In the midst of this shifting environment, the NDOI (as well as many other states) initiated its planning processes in order to meet the implementation deadline as required by federal law. To meet this need, PCG worked with representatives of the NDOI and the Nebraska DHHS to identify a recommended solution for moving ahead.

Nebraska's solution for meeting the requirements of the ACA is to acquire a rules engine that will provide a coordinated set of rules for the State's publicly-subsidized health coverage programs in one system. The eligibility rules engine will function to determine eligibility and be usable by authorized systems that are accessible to consumers, state workers, Navigators, or individuals shopping for health coverage. This recommended solution also includes the acquisition of a federated database to store recipient data for all of the publicly subsidized programs and the modification of existing systems to support the new populations. All total, the high-level one-time cost is estimated to be \$14,223,503. The annual ongoing IT-related cost is estimated at \$3,942,859.

The results of our work are provided in this Information Technology Roadmap, which describes the recommended solution and provides details on the estimated costs, as well as the steps and timeline for moving ahead.

## **2. Purpose, Scope, Approach**

In September 2010, the NDOI received a \$1 million grant award from the Office of Consumer Information and Insurance Oversight in the U.S. Department of Health and Human Services (HHS) to evaluate if Nebraska will establish an Exchange, and if so, begin conducting the critical planning activities for Exchange development. A portion of the grant award was used to fund a contract that was awarded to Public Consulting Group (PCG) to assist the NDOI in the development of an Information Technology (IT) Roadmap to inform future funding needs for a state-based Health Insurance Exchange. The overall goal of this planning effort was to conduct an initial assessment of existing state IT systems and to identify modifications and/or new systems that may be needed. This included customer service centers, state Medicaid eligibility and enrollment systems (to include Internet applications) and other existing state infrastructure that could be leveraged by an Exchange. The project scope included:

- Reviewing the Nebraska Department of Health and Human Services current processes and systems that support the eligibility and enrollment processes for primarily Medicaid and the Children’s Health Insurance Program (CHIP), but also for the Temporary Assistance for Needy Families (TANF) and the Supplemental Nutrition Assistance Program (SNAP).<sup>2</sup>
- Identifying current state initiatives and projects that may be impacted by, or have an impact upon, the Exchange planning efforts.
- Identifying the processes and systems that must be in place by the fall of 2013 in order to support the eligibility and enrollment functions for the new ACA populations.
- Conducting an IT Gap Analysis to compare current capabilities to the functional requirements of an Exchange.
- Identifying alternatives for bridging the gap between the current and future environments through leveraging existing technology assets and building new technology to meet the requirements of the ACA.
- Developing an estimated budget and timeline for implementing the recommended solution by the fall of 2013 and include ongoing annual maintenance costs.
- Documenting the outcome of the above activities in the final IT Roadmap report.

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<sup>2</sup> At the start of this project, the NDOI and the DHHS determined that the Exchange will not determine eligibility for welfare programs (e.g., SNAP, TANF) in January 2014. As a result, any discussion of current SNAP and TANF eligibility processes are discussed only in relation to processes that are used to determine eligibility for Medicaid in this report.

To complete this project, the PCG project team performed the following tasks:

- Reviewed existing ACA requirements and kept abreast of newly developed regulations as they were released by the HHS.
- Reviewed existing documentation provided by the Nebraska DHHS program and Information Technology (IT) areas.
- Reviewed and summarized responses to the NDOI's Request for Information (RFI) that was sent to vendors to identify the extent to which solutions exist in the marketplace to support the business functions of an Exchange.
- Met with Nebraska DHHS program and IT subject matter experts to agree upon the project assumptions, identify current projects underway, discuss the alternatives under consideration, and refine the recommended solution.
- Developed workflow diagrams to depict the process of applicants applying for medical insurance through the Health Insurance Exchange.
- Met with a representative of the Nebraska IT Commission (NITC) eHealth Council to identify current planning efforts related to two Health Information Exchanges that are being planned in the State.
- Met with a representative of the Nebraska DHHS' Customer Service Centers, and toured the Customer Service Center in Lincoln, NE to understand and document the State's ability to leverage the call centers to support the expanded Medicaid population in January 2014.
- Documented efforts that are being undertaken in the Early Innovator States to develop technologies to support the implementation of the ACA and potentially avail those technologies and lessons learned.
- Attended weekly meetings with the NDOI project team to review project status, identify issues and mitigate any risks that arose during the project.
- Attended bi-monthly meetings with Health Management Associates (HMA) who were providing actuarial and non-IT Exchange planning assistance to NDOI during the course of this project.

### **3. The Current Health Care Reform Environment**

Today's exchange planning environment is typified by a plentitude of activity and many unknowns. States are challenged with designing and implementing technical solutions while the ACA regulations are evolving and are being challenged in the courts. Efforts to build new governance structures while determining how best to leverage and share supporting technologies to support an Exchange by the fall of 2013 within the confines of federal and state rules are ambitious to say the least. To inform the State's decision-making process on how best to move ahead during these very fluid times, this section provides a brief description of the ACA requirements related to this project and discusses what is transpiring in states that were awarded Early Innovator grant funding.

#### **3.1. The ACA Requirements**

In March 2010, the ACA was enacted by Congress and signed into law by the President. The Health Care Reform law mandates the creation of Health Benefit Exchanges that will allow consumers to access and evaluate plans from commercial insurers and to apply for health subsidy programs (e.g., Medicaid, the Children's Health Insurance Program [CHIP], and subsidized commercial insurance through the Exchange) that best meet their needs through an online marketplace.

Integrating the eligibility determination and enrollment processes for publicly-subsidized health coverage programs and providing seamless coordination between the Exchange, Medicaid and CHIP will be critical to providing a 'one-stop shop' to coverage for millions of people across the country starting in 2014. The intent of the law is to allow an individual to supply a limited amount of information that can be used to determine eligibility for coverage under any of the publicly-subsidized health coverage programs available in the State.

The successful establishment and operation of the Exchange supports the ACA goal of extending coverage to tens of millions of Americans. Non-elderly individuals with incomes up to 133 percent<sup>3</sup> of the federal poverty level (FPL); based on the applicant's Modified Adjusted Gross Income (MAGI) will be eligible for expanded Medicaid. Through the Exchange, lower and middle-income individuals with MAGI up to 400 percent FPL may be eligible for subsidized commercial health insurance, with limits on point-of-service cost sharing and caps on out-of-pocket expenses. Small employers with lower-income workers that provide employer-sponsored insurance (ESI) purchased through the Exchange may also be eligible for premium subsidies for up to two years. IT systems and processes must be in place by mid-2013 to support these

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<sup>3</sup> The ACA provides for a 5% income disregard, which effectively increases the income eligibility for Medicaid to 138% FPL.

programs. The State will also need to establish processes to effectively and efficiently handle situations that will arise when circumstances change and people become ineligible for one program (e.g., Medicaid) and eligible for another (e.g., premium subsidies through the Exchange).

### Recent Rule Making

In July 2011, CMS issued rules on the establishment of Exchanges and Qualified Health Plans (QHPs). Rules were also issued on standards related to reinsurance, risk corridors and risk adjustment, which do not directly impact this project. However, the establishment of Exchanges and QHP rules present states with an option to pursue “a flexible State partnership model combining State-designed and operated business functions with Federally-designed and operated business functions. Examples of such shared business functions might include eligibility and enrollment, financial management, and health plan management systems and services.” Based on these unknowns, PCG believes that Nebraska should stay on course with its current planning efforts until the services that will be available at the Federal level become more clear.

In August 2011, CMS issued proposed rules implementing ACA requirements on Medicaid and CHIP eligibility determinations after 1/1/14, including a comprehensive redesign of eligibility categories and requirements, use of MAGI as the new financial eligibility standard for applicants who will be “newly eligible” beginning in 2014 due to the ACA, increased Federal medical assistance percentages (FMAP) for state expenditures with respect to such persons, and increased FMAP on state expenditures beginning in 2014 in “expansion states” offering a comparable federal financial benefit to states that expanded eligibility earlier. While these rules could impact the eventual governance and design of Nebraska’s proposed approach considerably, comments on the proposed rules are not due until the end of October 2011.

## 3.2. The Early Innovator States

In February 2011, the U.S. Department of Health and Human Services (HHS) announced the award of seven cooperative agreements to help a group of “Early Innovator” states design and implement the IT infrastructure that would be needed to operate Health Insurance Exchanges<sup>4</sup>. The federal government sought to reduce replication and the cost of work on the IT components of the Exchange in offering this opportunity. States seeking federal funding were required to provide assurances that new technology would be designed to be reusable and transferable in order to serve as building blocks for Exchange IT systems in other states and provide models for how Exchange IT systems can be created.

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<sup>4</sup> Cooperative Agreement to Support Innovative Exchange Information Technology Systems Funding Opportunity, February 2011.

As a result of this funding opportunity, Kansas, Maryland, New York, Oklahoma, Oregon, Wisconsin, and a multi-state consortium led by the University of Massachusetts Medical School (known as the New England States Collaborative Insurance Exchange Systems, or NESCIES) received a total of approximately \$241 million and became known as the Early Innovator states. Representing diverse approaches and different regions of the country, it was the federal government's intent to provide for a wide range of IT models from which every state could benefit rather than re-inventing the wheel.

### Summary

While most of the Early Innovator states are moving ahead, the planning process is slow going. Kansas and Oklahoma returned their grant money to the federal government. Most states are still in the process of establishing their governance structures. The reality of whether technologies developed by the Early Innovator states will be accessible and available for use in other states by January 2014 has come into question and in some instances is very dubious. Very few appear to be "cross-pollinating" with other states in order to understand their mutual business needs and information technology challenges. The Early Innovator states' exchange planning activities as of August 2011 are summarized in the table below.

**Table 3-1: Exchange Planning Activities in the Early Innovator States**

State	Grantee	Grant Amount	Original Proposal	Current Status
Kansas	Kansas Insurance Department	\$31,537,465	<p>Proposed IT Strategy:</p> <ul style="list-style-type: none"> <li>Leverage the new Kansas Medicaid/CHIP eligibility system (K-MED) that was procured and implemented by the Kansas Health Policy Authority (KHPA) and integrate K-MED with the Kansas Health Insurance Exchange to meet the requirements of the ACA.</li> <li>Explore the possibility of creating a “cloud” solution that would be accessible to other states.</li> </ul>	<p>Progress to Date:</p> <ul style="list-style-type: none"> <li>Kansas returned \$31.5 million of federal grant funding in August 2011</li> <li>Prior to that, the state had yet to pass legislation for an Exchange and is in the midst of suing the federal government to declare the ACA unconstitutional.</li> <li>The KHPA had announced that it would seek a Software as a Service (SaaS) solution for their Exchange in April 2011.</li> <li>Although the Exchange Steering Committee planned to release an RFP for a SaaS solution for the Exchange in July 2011, the Administration had delayed the procurement until the 2012 Legislature has the opportunity to evaluate the plan developed by the Committee.</li> </ul>
Maryland	Maryland Dept of Health and Mental Hygiene	\$6,227,454	<p>Proposed IT Strategy:</p> <ul style="list-style-type: none"> <li>Build off a prototype it has already developed that models the point of access for the Exchange,</li> <li>Integrate with Maryland legacy systems and the federal portal</li> </ul>	<p>Progress to Date:</p> <ul style="list-style-type: none"> <li>The Maryland Health Benefit Exchange Act of 2011 was signed into law in April 2011, which established the Exchange as an independent unit of State government.</li> </ul>



State	Grantee	Grant Amount	Original Proposal	Current Status
			<p>systems, and Maryland's consumption of planned federal web services (e.g. verification and rules).</p> <ul style="list-style-type: none"> <li>Healthy Maryland initiative to serve as technology foundation, extending this platform currently being used by several other states. This "point" solution will extend the existing Healthy Maryland platform, which was recently implemented.</li> </ul>	<ul style="list-style-type: none"> <li>The State is developing a solution that extends its existing "Healthy Maryland" platform as the Exchange infrastructure.</li> <li>The State plans to develop a hybrid Exchange that will be comprised of both public and private entities. The Exchange is expected to support social services eligibility as well.</li> <li>The State intends to generate a solution that can be leveraged within other states. Governor Martin O'Malley hopes the state becomes a leader in implementing an Exchange.</li> <li>In June 2011, the Exchange Board voted and approved the resolution for the Exchange Establishment Level 1 Grant Proposal. The application for Level One funding was submitted to HHS at the end of June.</li> <li>In July 2011, Maryland Health Benefit Exchange issued a Navigator and SHOP Research/Analysis RFP, and named the Chairs of the Advisory Committees (18 in total).</li> </ul>
Connecticut, Maine, Massachusetts, Rhode Island,	University of Massachusetts Medical School	\$35,591,333	<p>Proposed IT Strategy:</p> <ul style="list-style-type: none"> <li>Create and build a flexible Exchange information technology</li> </ul>	<p>Progress to Date:</p> <ul style="list-style-type: none"> <li>The University hired a consultant (CGI Group Inc.) to</li> </ul>



State	Grantee	Grant Amount	Original Proposal	Current Status
and Vermont (NESCIES)			<p>framework in Massachusetts and share those products with other New England states.</p> <ul style="list-style-type: none"> <li>Apply lessons learned from the Massachusetts Exchange implementation and gain efficiencies so it can accelerate Exchange development for participating New England states.</li> </ul>	<p>assist in a business process redesign that will determine whether the current Exchange IT components will meet the CCIIO and CMS standards, and the extent to which they could be reusable by members of the consortium.</p> <ul style="list-style-type: none"> <li>NESCIES has categorized its reusability approach into 3 tiers: sharing artifacts, jointly procuring HW/SW, and offering a SaaS approach to members of the consortium.</li> <li>NESCIES is planning on releasing its RFP for a systems integrator in August 2011</li> <li>The solution is projected to go live in February 2013.</li> </ul>
New York	New York Department of Health	\$27,431,432	<p>Proposed IT Strategy:</p> <ul style="list-style-type: none"> <li>Build off its eMedNY Medicaid Management Information System (MMIS) system to build products for the Exchange.</li> <li>This approach will also result in the development of Exchange IT components fully extensible and scalable to any other jurisdiction.</li> </ul>	<p>Progress to Date:</p> <ul style="list-style-type: none"> <li>In late June 2011, negotiations were concluded on a bill to establish a Health Benefit Exchange. The bill authorizes one statewide Exchange that would be governed by a Board of Directors, consisting of nine state officers or employees, with appropriate powers to implement key components of the federal law in New York State. Exchange bill passed in the Assembly by an 82-44 vote, but has not yet been approved</li> </ul>

State	Grantee	Grant Amount	Original Proposal	Current Status
				<p>by the Senate.</p> <ul style="list-style-type: none"> <li>• The New York Department of Health plans to build an Exchange off of the existing eMedNY Medicaid Management Information System (MMIS). The eMedNY MMIS system will serve as a base and produce products for the future exchange.</li> <li>• The Exchange technical architecture will support and integrate with the Medicaid program, including but not limited to Medicaid eligibility and enrollment determinations and to anticipated enhancements to New York's current Medicaid eligibility system, as well as support the six core business areas as defined by CMS.</li> <li>• The state released a Funding Availability Solicitation (FAS) to acquire a contractor to design, develop and deliver an operational ready Exchange solution in July 2011. The Department of Health intends to award a four year contract with the option to extend the contract for five additional years.</li> <li>• The state has two ideas for models for the Exchange -- one being a public benefit corporation, the other a public</li> </ul>

State	Grantee	Grant Amount	Original Proposal	Current Status
				authority. The first model, in which the Exchange authority would act as a buyer, would regulate insurance plans and set minimum requirements for plans offered. The second model would have no regulatory leverage and no power to act as a buyer.
Oklahoma	Oklahoma Health Care Authority	\$54,582,269	<p>Proposed IT Strategy:</p> <ul style="list-style-type: none"> <li>Extend its current technical architecture of Medicaid Management Information System (MMIS) and several other systems to implement the Oklahoma Health Infrastructure and Exchange initiative.</li> <li>Leverage tools such as the web-based real time claims processing provider service portal created in 2003 by the Oklahoma Health Care Authority.</li> <li>Oklahoma will issue an RFP under this grant to conduct a gap analysis to determine the necessary steps for its systems to become operational for the Exchange factoring in portability and reuse.</li> </ul>	<p>Progress to Date:</p> <ul style="list-style-type: none"> <li>Oklahoma returned \$54.6 million of federal grant funding in April 2011 due to fears that accepting the funding would intrude upon the State's Exchange planning efforts.</li> <li>Legislation (SB971) to establish the Oklahoma Health Insurance Private Enterprise Network has been introduced.</li> <li>The State plans to use its own funds to develop an Exchange. Legislative leaders in Oklahoma have stated that they will not be considering a plan to set up an Exchange, and instead will be study the issue in the interim.</li> </ul>
Oregon	Oregon Health Authority	\$48,096,307	<p>Proposed IT Strategy:</p> <ul style="list-style-type: none"> <li>Leverage a commercial off-the-shelf (COTS) application to create the Exchange.</li> <li>Create a modular, reusable IT</li> </ul>	<p>Progress to Date:</p> <ul style="list-style-type: none"> <li>Oregon is moving forward with system design for its Exchange. The state hired a consulting firm (Wakely Consulting) to assist in</li> </ul>

State	Grantee	Grant Amount	Original Proposal	Current Status
			<p>solution that will provide the Exchange's customers</p>	<p>planning efforts, and passed legislation (Senate Bill 99) in June 2011 to establish an Exchange.</p> <ul style="list-style-type: none"> <li>• Oregon will also be considering House Bill 3650 for Health Care Transformation that will create an integrated, coordinated health care delivery system for Oregon Health Plan recipients. The Governor is encouraging state lawmakers to move forward on the bill.</li> <li>• Oregon released a request for proposal (RFP) to procure the Exchange software, which will be followed by a solicitation for system integrator services.</li> </ul>
Wisconsin	Wisconsin Department of Health Services	\$37,757,266	<p>Proposed IT Strategy:</p> <ul style="list-style-type: none"> <li>• Implement a single, intuitive portal through which residents can access subsidized and non-subsidized health care and other state-based programs (e.g. Medicaid, CHIP, child care).</li> <li>• The Exchange will integrate across health and human services programs to promote efficiency and lower overall administrative cost.</li> </ul>	<p>Progress to Date:</p> <ul style="list-style-type: none"> <li>• Wisconsin is building out its automated eligibility system for state-based health insurance programs despite the Governor's oppositions to the healthcare reform law.</li> <li>• Wisconsin has held numerous webinars to demonstrate its web portal and has offered the source code at no cost to interested states.</li> <li>• The State has contracted Deloitte to work on its eligibility system, known as CARES, which will have Exchange</li> </ul>

State	Grantee	Grant Amount	Original Proposal	Current Status
				<p>capabilities. ACCESS, Wisconsin's Web-based self-service tool for checking eligibility for health benefits and other forms of assistance is fully integrated with CARES and the State's MMIS system.</p> <ul style="list-style-type: none"> <li>• The State recently released a Request for Information (RFI) for research relating to marketing of an Exchange.</li> <li>• In mid-July, Wisconsin reported that it will be using Corticon's automatic rules engine to streamline the eligibility process. The system will determine eligibility upfront and then guide the information selection process with little to no interaction with case workers.</li> </ul>

## 4. Existing Eligibility Processing Operational and Technical Environment

This section provides a brief description of the current program and technical environments at the Nebraska DHHS.

### 4.1. Program

#### The Medicaid Program

In 1965, Title XIX of the Social Security Act initiated a jointly funded medical assistance program for certain individuals and families with low incomes and resources. The program, called Medicaid, is a cooperative venture between the federal and state governments to assist states in providing medical care to eligible needy persons. Nebraska's Children's Health Insurance Program (CHIP) is a Medicaid expansion program, meaning that the State uses federal CHIP funds to extend Medicaid benefits to children who meet the CHIP eligibility requirements<sup>5</sup>. Today, the Medicaid program is the largest program providing medical and health-related services to America's poorest people.

The Medicaid program, although jointly funded by the federal and state governments, is administered by the state. Under broad federal guidelines, each state establishes its own eligibility standards, determines the scope of covered services and sets rates of payment. In Nebraska, Medicaid provides health care services to eligible elderly and disabled individuals and eligible low-income pregnant women, children and parents. Nebraska Medicaid has a budget of roughly \$1.6 billion. Currently an estimated 11.6 percent of Nebraska residents are enrolled in Medicaid, or approximately one in nine residents. Based on an independent study<sup>6</sup>, the new provisions of the federal health care law could expand eligibility to close to 20 percent of residents, or approximately one in every five Nebraskans, adding more than 145,000 Nebraskans to the Medicaid program over the next decade.

#### Nebraska DHHS

The Nebraska Department of Health and Human Services (DHHS) is comprised of six divisions led by a Chief Executive Officer. The agency divisions and brief descriptions are outlined below.

- *Behavioral Health* administers state hospitals for the mentally ill and publicly funded community-based behavioral health services.

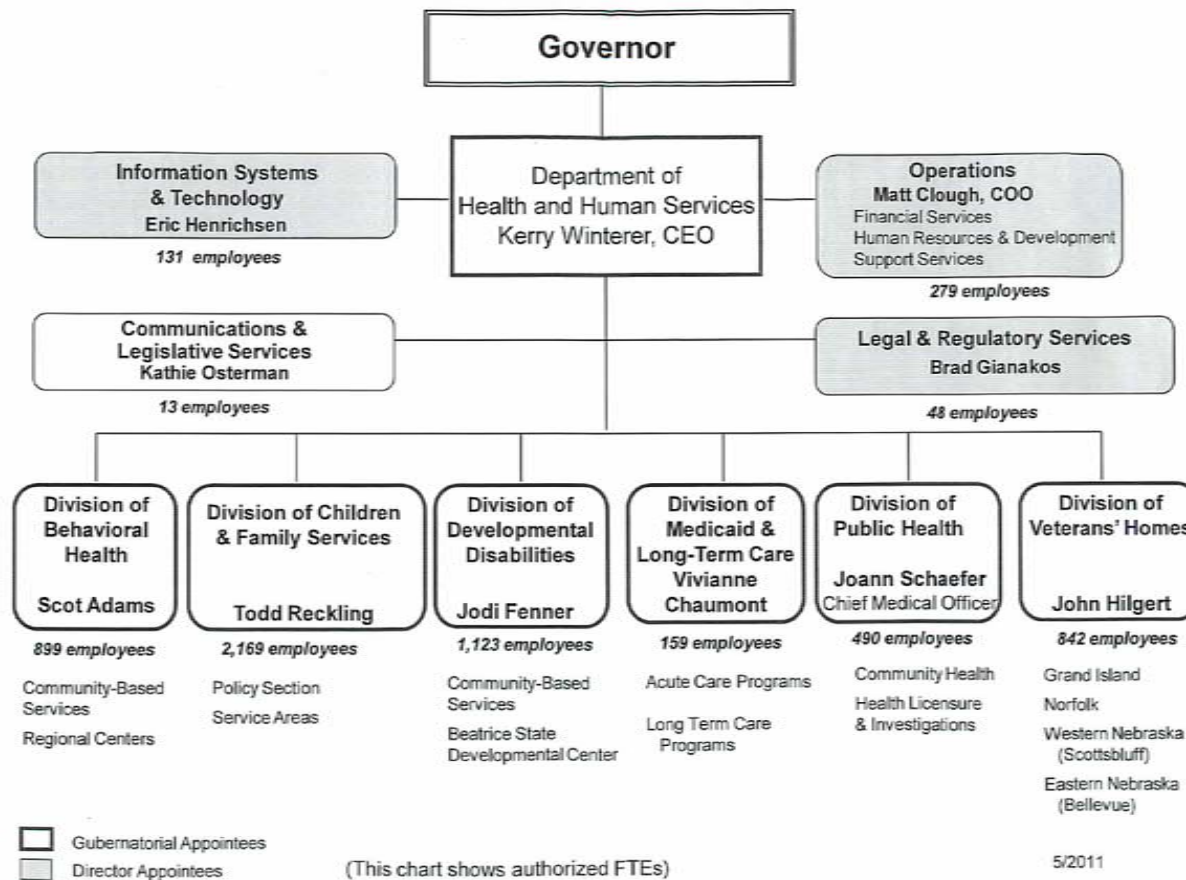
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<sup>5</sup> Hereinafter within this report the use of the term 'Medicaid' will refer to both Medicaid and CHIP.

<sup>6</sup> <http://www.governor.nebraska.gov/news/2010/08/pdf/Nebraska%20Medicaid%20PPACA%20Fiscal%20Impact.pdf>

- *Children and Family Services* includes protection and safety programs and services (child welfare, juvenile services), economic and family support programs and services, and the service areas. Economic assistance service delivery of the determination of eligibility and benefits including Medicaid is currently provided by local DHHS offices located throughout Nebraska.
- *Developmental Disabilities* consists of the Beatrice State Developmental Center and publicly-funded community-based developmental disabilities services
- *Medicaid and Long-Term Care* administers the Medicaid program, aging services, and other related programs and services
- *Public Health* includes preventive and community health programs and services, regulation and licensure of health-related occupations, regulation and licensure of health care facilities, and health care services
- *Veterans' Homes* includes several facilities located throughout the State

The current Nebraska DHHS organization chart is provided in the figure below.



**Figure 4-1: Nebraska DHHS Organization Chart**



A Chief Information Officer (CIO), in charge of Information Systems and Technology (IS&T) and a Chief Operating Officer (COO), in charge of operations that support the Department, also report to the CEO. Operations areas within the Nebraska DHHS include: Communications and Legislative Services, Financial Services, Human Resources and Staff Development, Legal and Regulatory Services, and Support Services.

### **The Current Application Process**

In Nebraska, the current application process is supported through AccessNebraska, which modernized how services are provided to applicants and recipients. Through AccessNebraska, individuals can apply for Medicaid, the Supplemental Nutrition Assistance Program (SNAP), Temporary Assistance for Needy Families (TANF), and other programs. The AccessNebraska concept is comprised of three components: the ability to apply for services online; document scanning and retrieval of economic assistance case files; and the creation of four customer service centers.

Currently, over 60 percent of the individuals seeking Medicaid services apply online. Through an online tool (described in Section 4.1.1) that is currently available via the Nebraska DHHS website<sup>7</sup>, applicants can identify programs that might meet their needs, determine whether they may qualify for services, apply or re-apply for services, report changes, and view their current benefits. The application process can be completed within 15 – 20 minutes through AccessNebraska.

To support the application process, the Nebraska DHHS recently established Customer Service Centers that are responsible for conducting interviews, taking customer changes and providing information and referral services via the telephone. By 2012, the Nebraska DHHS will have four customer service centers to provide a more efficient way to process and approve requests for economic assistance services like Medicaid, SNAP, Aid to Dependent Children, energy assistance, assistance to the aged, blind or disabled, child care, employment assistance, and Social Services Block Grant (transportation, chore, meals, respite) assistance.

Customer Service Centers are already, or will soon be, located in:

- Lincoln: This center has approximately 100 staff and began taking calls in November.
- Fremont: This center opened in May 2011 with approximately 150 staff.
- Lexington: This center is planned to open with about 50 staff in the fall of 2011.

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<sup>7</sup> <https://dhhs-access-neb-menu.ne.gov/start/?tl=en>

- Scottsbluff: This center is planned for January 2012 and will include 100 staff.

The Lincoln Customer Service Center was the test site for a new Universal Queue Caseload methodology and began taking calls from clients in mid-November. With this new system, clients call an 800 number for assistance. Instead of having one assigned caseworker, calls are routed to either a family team or adult team of caseworkers, based on preliminary information provided by the caller. The Nebraska DHHS allowed for 25 percent growth in building the Customer Service Centers.

The Customer Service Centers primarily offer service over the phone. However, people will continue to have the option of going to a local office and talking to someone in person even after all four centers are in place. Many local offices also are equipped with computer kiosks, and telephones to provide increased access to services.

## **4.2. Technical**

The current technical environment is developed, managed, and maintained by a combination of two organizations, IS&T and the State's Office of the Chief Information Officer (OCIO).

IS&T administers the Nebraska DHHS computer resources and provides support in such areas as: feasibility studies, system design and development, system maintenance, computer hardware/network acquisition, installation and maintenance, data processing operations, and system project management. IS&T maintains the Nebraska DHHS Help Desk and desktop support, Outlook email and Lotus Notes databases. It is responsible for application support of Nebraska DHHS applications, including the ones highlighted in this report: the Medicaid Management Information System (MMIS), the Nebraska Family Online Client User System (N-FOCUS) and AccessNebraska<sup>8</sup>. Over the past several years IS&T's efforts have primarily focused on maintaining the Nebraska DHHS' legacy applications.

The OCIO administers the State's data center and telecommunications network. The Nebraska DHHS purchases staffing and computing resources from the OCIO, and collaborates with the OCIO to manage, operate and maintain the MMIS.

The IT applications that are maintained by IS&T in support of the Nebraska DHHS Division of Medicaid and Long-Term Care programs include:

- *N-FOCUS* – Nebraska's integrated eligibility and case management system.

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<sup>8</sup> This section of the report speaks to the component of AccessNebraska that offers an online web application.

- *AccessNebraska* – This application is a public facing front-end for N-FOCUS. Its web-based interface provides the public access to apply for public aid (multiple programs). Personal support provided by Customer Service Representatives occurs through AccessNebraska
- *Medicaid Management Information System (MMIS)* – This system adjudicates Medicaid claims and maintains the claims history and eligibility data of Medicaid beneficiaries

These core systems that currently support the enrollment and eligibility determination functions of Nebraska’s publically subsidized benefits programs are described below.

#### **4.2.1. The Nebraska Family Online Client User System (N-FOCUS)**

N-FOCUS (Nebraska Family Online Client User System) is an integrated client/server system that automates benefit and service delivery and case management for over 30 Nebraska Health and Human Services System programs, including client benefit determination, Medicaid eligibility and child welfare. N-FOCUS functions include client/case intake, eligibility determination, case management, service authorization, benefit payments, ancillary claims processing and payments, provider agreements, and government and management reporting. N-FOCUS is also the Statewide Automated Child Welfare Information System (SACWIS) for the Nebraska DHHS. N-FOCUS was implemented in production in mid-1996 and today is operational statewide. N-FOCUS interfaces with the MMIS.

The application has both batch and online components and stores data in DB2, V9. The DB2 database has over 500 tables, some with a corresponding archive table. There are over 550 relationships between tables, 935 indexes, and over 8700 attributes. There are over 1.3 billion rows of production data with over 200 million rows in one table.

The batch system is coded in Z/OS COBOL and executes in a Z/OS environment. There are more than 700 procedures, over 640 programs, and over 220 stored procedures. The application generates over 540 reports using Crystal Reports that are published to a web portal through Business Objects Enterprise software.

The online system is an integrated client/server based software system. The client software executes on Windows 7 client workstations and resides on Windows 2003/2008 servers located throughout the State. Computer Associates Gen and AION toolsets are used to generate windows and C code, along with custom in-house architecture code written in C. The server components are Z/OS CICS transactions. The CICS programs are Gen-generated COBOL, along with in-house written COBOL and Assembler externals. The CICS programs access DB2 on the Z/OS mainframe. The Gen clients use External Call Interface (ECI), IBM’s CICS Universal Client to connect to the Z/OS CICS using TCP/IP

protocol. The Gen online system consists of over 490 client procedures, 470 server procedures, 475 windows, and 1300 dialog boxes. The AION online system supports the complex eligibility data gathering and automated determination and noticing processes.

N-FOCUS web applications consist of public applications, including dashboard applications, and applications launched directly from N-FOCUS. Eclipse is the IDE used to generate the Java Server Faces and Facelets code. These Java applications run on Tomcat application servers on the Linux Operating System. The Java applications call stored procedures to access DB2 data and SQL to access SQL Server data.

#### 4.2.2. AccessNebraska

The web-based front end application called AccessNebraska is approximately three years old. It was established in 2008. This tool supports: 1) Screening – a 17 question survey that helps clients understand their eligibility status; 2) e-App – the electronic application for benefits; 3) Change reporting – permits clients to update name, address and other demographic data with changes; and 4) Inquiry – allows clients to check on the status of their benefits. This front-end application is available to users in Spanish and English.

AccessNebraska operates with a temporary SQL database which is refreshed to the DB2 database in N-FOCUS every 15 minutes. The AccessNebraska applications include:

- Dashboard Client – This application uses a CTI (computer-telephone integration) client agent from E-Metro Tel. This allows the call center workers to answer calls, place them on hold, or terminate them using the computer.
- Dashboard Manager Shortcut – This shortcut provides access to the Nortel Contact Manager. This provides the ability to review call statistics as they are taking place in real time.
- Nortel Contact Recording and Quality Monitoring (CRQM) – This tool is used to monitor customer interactions. It allows search of the recorded customer calls so they can be listened to for follow up on customer and staff issues.

#### Database

N-FOCUS provides the call center/IVR real time data using stored procedure calls to DB2.

#### WAN

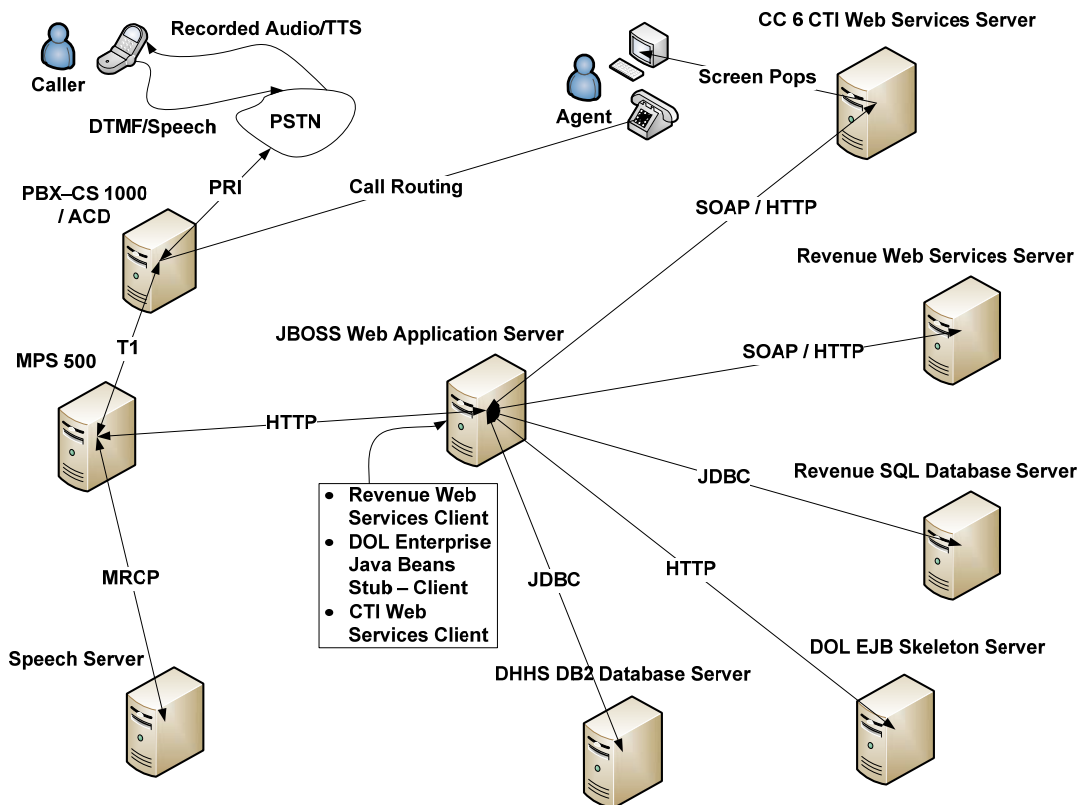
Each Customer Service Center is connected to the State's MPLS backbone with a 10Mb point-to-point WAN circuit. This circuit is used for both data and Voice over Internet Protocol (VoIP) traffic.

## **Voice**

All calls into the Customer Service Centers initially arrive at an Interactive Voice Response System hosted on an Avaya MPS500. The system can be interfaced by the caller using either DTMF touch tones or voice recognition. The MPS500 scripting carries callers through an elaborate dialogue where information is exchanged between the Nebraska DHHS N-FOCUS database and the caller. Some callers may be able to complete their business using only the IVR while others are placed in a queue to talk to a Customer Service Representative best suited to assist them based on information provided while interfacing with the IVR.

All Customer Service Representatives use a combination of Avaya telephone sets, custom designed Computer Telephone Integration software, and screen pops to communicate with the callers. As a call arrives at the Customer Service Center, the callers account information is automatically “popped” onto the computer screen in order to more effectively and expeditiously assist the caller. The Customer Service Center hardware and software operates on a combination of Avaya platforms designed to distribute calls to the Customer Service Representative most available in any one of four geographically dispersed call centers throughout Nebraska. The Avaya platform provides redundancy, resiliency, reporting, and centralized management. Customer Service Centers in Lincoln, Fremont, Scottsbluff, and Lexington operate as a single unit utilizing VOIP across the State backbone. Each site is designed and configured for remote survivability. In the event of a data network outage each site can operate independently with the exception of having the ability to accept calls. Currently the AccessNebraska system processes an average of 58,000 calls per month.

Following is a graphical depiction of the Customer Service Center server configuration.



**Figure 4-2: Server Configuration for the Customer Service Center**

### 4.2.3. Medicaid Management Information System (MMIS)

The foundation of the current MMIS technical architecture was developed in 1973. The current MMIS has been fully operational since 1978 and became HIPAA compliant in October 2003. The MMIS consists of batch and online CICS mainframe components and a front-end HIPAA compliant Sybase Translator.

The Nebraska MMIS currently consists of the following 16 subsystems:

1. Data Management – The Nebraska DHHS currently contracts with Thomson Reuters for data management, housing ten years of Medicaid claims and provider and client information used to facilitate management reporting, including the Management & Administrative Reporting Subsystem (MARS), the Surveillance and Utilization Review Subsystem (SURS) and the MSIS reporting.
2. Drug Claims Processing – The Nebraska DHHS currently contracts with First Health Services Corporation (FHSC) for drug claims receipt and adjudication. The FHSC Point of Service (POS) system supports the National Council for Prescription Drug Programs standards, including currently 5.1 (real-time) and 1.1 (batch) formats. The POS sends processed pharmacy claims to the State’s MMIS on a daily basis, where



the claims are passed into the MMIS weekly payment cycle for final adjudication, payment, and reporting.

3. Management & Administrative Reporting Subsystem (MARS) – Provides system generated reports. The Nebraska DHHS also contracts with Thomson Reuters to provide management information.
4. Medicaid Drug Rebate (MDR) – A PC-based extract from MMIS claims history to prepare quarterly invoices for drug rebates from manufacturers.
5. Medical Claims Processing (MCP) – Edits claims and calculates reimbursement amounts.
6. Medical Non-Federal (MNF) – Ensures that Title XIX Federal matching funds are not used to pay for health care services otherwise available through Title XVIII (Medicare) funding.
7. Medical Provider Subsystem (MPS) – Maintains demographic, eligibility, and licensing data for all enrolled Medicaid providers.
8. Nebraska Aging Management Information System (NAMIS II) – This application supports the activities of the State Unit on Aging. It was developed to enter, edit, monitor, and report services provided by Area Agencies on Aging in Nebraska, track services required by the U.S. Administration on Aging (AoA), and to compile information required by the AoA for NAPIS, the National Aging Program Information System. It is also used to manage programs, track costs in certain services, track program usage, and analyze client demographics.
9. Nebraska Disability Program (NDP) – Accounts for the separate funding of health care services for disabled persons who do not meet the SSI disability duration requirements but are eligible for the same medical services as Medicaid.
10. Nebraska Managed Care System (NMC) – Provides plan and PCP enrollment of Medicaid clients into managed care, and documentation of communications between the client, the enrollment broker, and the managed care plans. The NMC offers basic case management functionality.
11. Nebraska Medicaid Eligibility System (NMES) – An automated voice response system used to verify client Medicaid or managed care eligibility for Nebraska Medicaid. The current Interactive Voice Response Unit also supports the Nebraska's Child Support system, known as Children Have A Right To Support (CHARTS), which serves as Nebraska's statewide Child Support Enforcement (CSE) system.
12. Recipient File Subsystem (RFS) – Uses and maintains Medicaid client eligibility data obtained from N-FOCUS.

13. Reference File Subsystem (RSS) – A database containing various reference information that includes but is not limited to, procedure, diagnosis and drug codes, and fee schedules.
14. Screening Eligible Children (SEC) – Facilitates comprehensive, preventative health care and early detection and treatment of health problems in Medicaid eligible children.
15. Surveillance and Utilization Review Subsystem (SURS) – Provides system generated reports. The Nebraska DHHS also contracts with Thomson Reuters for reports and tools to support the investigation of potential provider fraud, abuse, or misuse.
16. Third Party Liability (TPL) – Stores information on Medicaid clients with private insurance; contains edits and produces reports for coordination of benefits and recovery.

The MMIS consists of batch and online CICS mainframe components and a front-end HIPAA compliant Sybase Translator. Batch components consist of 829 COBOL programs and 208 Batch Assembler programs (DRG software). The online CICS consists of 343 COBOL programs and 2 Online Assembler programs. There are 7 COBOL programs that are used both in Batch and Online. There are 406 jobs executed on a scheduled basis and an additional 150 on a request basis. The online CICS component consists of 27 transactions with over 225 on-line screens.

The Sybase translator communicates to a server database (mainframe DB2) through a UDB Gateway utilizing the TCP/IP communications protocol. The translator application consists of 44 VBScripts, 7 VA Cobol programs, 282 Gateway Scheduler Tasks, 272 Gateway Process Scripts, 13 Compliance Maps, 13 in-house developed EMap maps and 10 CONNECT: Direct processes. As of February 2011 there are 359 Trading Partners set up in the Trading Partner server, 231 of which are in production with one or more transactions. A total of six servers are used to support the translator software.

The CICS online and batch components make use of 13 DB2 databases with 523 tables and 505 million rows of data. The Sybase Translator utilizes 79 tables and over nine million rows of data in a Windows server environment.

#### **4.2.4. System Limitations**

Starting in 2014, Exchanges will help qualified individuals and small employers shop for, select, and pay for private health plans that, according to proponents, will be high-quality, affordable, and fit individual needs at competitive prices. By providing a place for one-stop shopping, it is intended that Exchanges will make purchasing health insurance easier and more understandable. Having a sophisticated, consumer-friendly IT infrastructure will be critical to success. Nebraska's ability to meet these requirements will be significantly impacted by: 1) the age of some of its back-end legacy systems that are built on outdated



technology and, 2) the federal timeframe that has been established for states to implement Exchanges.

Expectations at the federal level have been set. To help frame the future, “to-be” environment for which the State needs to strive, direction provided by the Centers for Medicaid and Medicare Services (CMS) regarding IT systems is summarized below.

### **CMS Framework for IT Systems**

The CMS has established a framework and approach for developing IT systems<sup>9</sup>, focusing primarily on those components and functions that are the subject of the Early Innovator IT Cooperative Agreement awards issued in February 2011<sup>10</sup>, and the Final Rule on Federal Funding for Medicaid Eligibility Determination and Enrollment Activities<sup>11</sup>. In January 2011, the U.S. Department of Health and Human Services (HHS) announced enhanced funding opportunities for grants to help states implement Exchanges. States receiving funding under a Cooperative Agreement for Exchange development or under an Advance Planning Document (APD) under Medicaid for eligibility system development must pay close attention to, and comply with this guidance. Based upon these national standards, new systems must:

- Support real-time eligibility determination, routing and enrollment whenever feasible, and for all individuals, a timely and responsive resolution process;
- Create a knowledge-base that serves as a single “point of truth” for business rules and is complemented with a high level of integration to avoid duplication of costs, processes, data and effort on the part of the State and beneficiaries;
- Leverage the federal approach [federal hub] for verification from federal agencies such as the Internal Revenue Service, Department of Health and Human Services, and Department of Homeland Security to eliminate the independent establishment of those interfaces and connections at the State level;
- Achieve the necessary degree of interoperability between technology components to provide health insurance coverage through the Exchange, Medicaid or the Children’s Health Insurance Program (CHIP);

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<sup>9</sup> *Guidance for Exchange and Medicaid Information Technology (IT) Systems*, ver. 2.0, May 2011.

<sup>10</sup> See <http://www.healthcare.gov/news/factsheets/exchanges02162011a.html>.

<sup>11</sup> Published in the Federal Register on April 19, 2011 (Volume 76, Number 75, at 21950).

- Build a solution that will meet the seven CMS conditions and standards<sup>12</sup> that were developed to ensure that states are making efficient investments and improving the likelihood of successful implementation and operation;
- Support MITA initiatives that provide a common framework to focus on opportunities to build common services by decoupling legacy systems and processes, liberating data previously stored and contained in inaccessible silos, and increasing the State's ability to keep up with the rate of change demanded by the changing business landscape of health care delivery and administration;
- Move the design and development of the State's Medicaid systems away from siloed systems to a service oriented architecture (SOA) framework;
- Build a solution that provides the flexibility of open interfaces and exposed application program interfaces (APIs);
- Ensure alignment with, and incorporation of federal standards to include HIPAA requirements<sup>13</sup>, standards that provide greater accessibility for individuals with disabilities<sup>14</sup>, ACA requirements<sup>15</sup>, and federal civil rights laws;
- Reduce time to deliver and overall costs by separating the business rules from the rest of the application logic; and
- Be scalable to allow for the incorporation of shared eligibility determination rules to support the State's phased approach.

### **Nebraska's IT System Limitations**

Like most states, Nebraska's current IT environment is not yet in line with CMS' vision for the future. Nebraska's current legacy systems are characterized as follows:

- The MMIS was designed in the 1970s and as such employs a dated application architecture. N-FOCUS was designed in the early 1990s and utilizes client/server application architecture. Neither of these architectures embodies relevant MITA principles such as comprehensive modularity, use of open and exposed application programming interfaces (APIs), and separation of business rules from core programming. Neither

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<sup>12</sup> *Enhanced Funding Requirements: Seven Conditions and Standards, Medicaid IT Supplement (MITS-11-01-v1.0) Version 1.0, April 2011.*

<sup>13</sup> The security, privacy and transaction standards established under Health Insurance Portability and Accountability Act of 1996 (HIPAA).

<sup>14</sup> Section 508 of the Rehabilitation Act.

<sup>15</sup> Section 1104 of the ACA, and standards and protocols adopted by the Secretary under section 1561 of the ACA.

the MMIS nor N-FOCUS use a service-oriented architecture or a business rules engine.

- The MMIS was not designed for configuration, although some MMIS reference subsystem elements are table-driven. The MMIS does not employ a comprehensive table-driven architecture and system features are not designed to be configurable. Similarly, the MMIS design predates a benefit plan approach to administration of health care programs, as such the system does not support configurable benefit plans.
- Given these conditions, the ability to reuse and leverage current investments, especially from the national perspective, is limited. In addition, the ability to change the systems rapidly in response to today's dynamic Medicaid business environment is limited.
- The MMIS does not support real time (or near real time) adjudication of claims. The MMIS utilizes a non-relational master file for core batch claims processing activities which does not readily lend itself to an enhancement to support real time adjudication. The non-relational nature of the master file also adds time and cost to changes that involve new data elements or significant data structure changes.
- The MMIS lacks a web portal with functionality for external stakeholders.
- Two of the primary N-FOCUS development tools, CA Gen and CA Aion, are no longer leading, strategic development technologies in the marketplace.
- Both the MMIS and N-FOCUS have limited current capability to meet management reporting needs.
- There is no electronic feed between the AccessNebraska online tool and N-FOCUS. Applications received electronically must be rekeyed by staff in order to complete the eligibility determination and enrollment process.

### **4.3. State Initiatives**

The following is a list of ongoing projects and/or initiatives that are on Nebraska's horizon – whether from a program planning or an IT development perspective – and should be considered as the State moves through its Exchange planning efforts. While some projects may pose resource contentions, others may be seen as significant contributors to the goals of health care reform. Having awareness and understanding of if and how these initiatives impact the project in terms of creating project dependencies or providing opportunities for leverage new functionality is important. The initiatives that were identified as of the date of this report, and the impact each has on the DOI Exchange planning project, are included in the table below.

**Table 4-1: Current State Initiatives**

<b>Initiative / Project</b>	<b>Description</b>	<b>Impact</b>
Nebraska DHHS Customer Service Centers	Customer Service Centers are responsible for conducting interviews, taking customer changes and providing information and referral services via the telephone.	High -- These centers could be leveraged to meet some of the ACA requirements regarding the establishment of call centers.
Eligibility re-certification / re-determination	Will retrieve previous information for a client when they are required to submit a new application to meet review/recertification requirements through AccessNebraska. The requested target release date for this project is March 2012.	High -- This project directly supports the federal government's goals of allowing applicants to either apply for, or re-apply for health coverage online.
Automated clearance	Will automate/facilitate 'clearance', or the process to identify whether an applicant is already receiving benefits or services. The requested target release date for this project is July 2012.	High -- This project directly supports the federal government's goal of streamlining the eligibility determination process and CMS' expectation that most individuals will be able to complete their online application and be enrolled in a program within 15 to 20 minutes.
Document Imaging	Will allow applicants to electronically submit documentation in support of an electronic application that is submitted through AccessNebraska. This project is to be released in July 2011 and is supported by a federal grant.	Medium -- This project supports the federal government's goal of streamlining the application process for publicly funded health coverage programs.
Client Benefit Inquiry	Will allow clients to inquire into the tracking/ status of the receipt of their requested verifications through AccessNebraska. The requested target release data for this project is March 2012.	Medium -- This project supports the federal government's goal of making it easier for individuals to seek health coverage through an automated process
Nebraska IT Commission (NITC) eHealth Council studies	The NITC is currently administering a \$6.8 million grant that is supporting the development and enhancement of two Health Information Exchanges (HIEs) – the Nebraska Health Information Initiative (NEHII) and the eBehavioral Health Information Network (eBHIN) – that will eventually become part of the National Health	Low -- While the NITC does not see any linkage between the HIE and Exchange planning efforts, NEHII is currently developing a provider directory that will be available in 2012. Once available, the NDOI may wish to evaluate the extent to which the directory could be leveraged by a

<b>Initiative / Project</b>	<b>Description</b>	<b>Impact</b>
	Information Network (NHIN).	state-based Exchange.
Applicant verification / DMV Access	Will provide users the ability to access their Department of Motor Vehicle information directly from N-FOCUS. This project is to be released in July 2011.	Low -- This project is indirectly related to the ACA requirements which encourage states to implement real-time interfaces.
Adding Developmental Disabilities programs to N-FOCUS	Will provide screening, electronic application and change reporting functionality for DD programs through AccessNebraska. This project is to be released in July 2011.	Low -- This project is indirectly related to the ACA requirements that encourage states to provide a "one-stop shop" to individuals seeking health and welfare benefits and services.
Automated Interface with the Department of Education	Will provide an interface to N-FOCUS that allows the Department of Education to certify an applicant for the National School Lunch Program (NSLP).	Low -- This project is to be released in July 2011. As the NSLP and Express Eligibility are addressed in the ACA requirements, this project speaks to the federal government's intent of health care reform.
Automated Interview Scheduling	Will provide an automated interview scheduling system for AccessNebraska. The requested target release data for this project is March 2012.	Low -- This project may support the federal government's goal of streamlining the application process for publicly funded health coverage programs.

## **5. Future Environment / IT Roadmap**

This section presents the recommended approach to leveraging Nebraska's existing systems supporting Medicaid eligibility determination and enrollment functions and developing new systems to support the requirements of the ACA. It describes:

- Alternatives considered.
- The recommended solution.
- High-level cost estimates for the planning, design, development and implementation (DD&I) and maintenance and operations (M&O) of the recommended solution
- A road map / project timeline for the DOI and the Nebraska DHHS to pursue in order to implement the recommended solution in accordance with the ACA requirements.

### **5.1. Alternatives Considered**

Models that were considered to implement the eligibility and enrollment requirements of the ACA in Nebraska are described in this section. Through collaboration with the NDOI and the Nebraska DHHS, PCG developed and presented four alternatives upon which Nebraska could base its future, "to-be" environment.

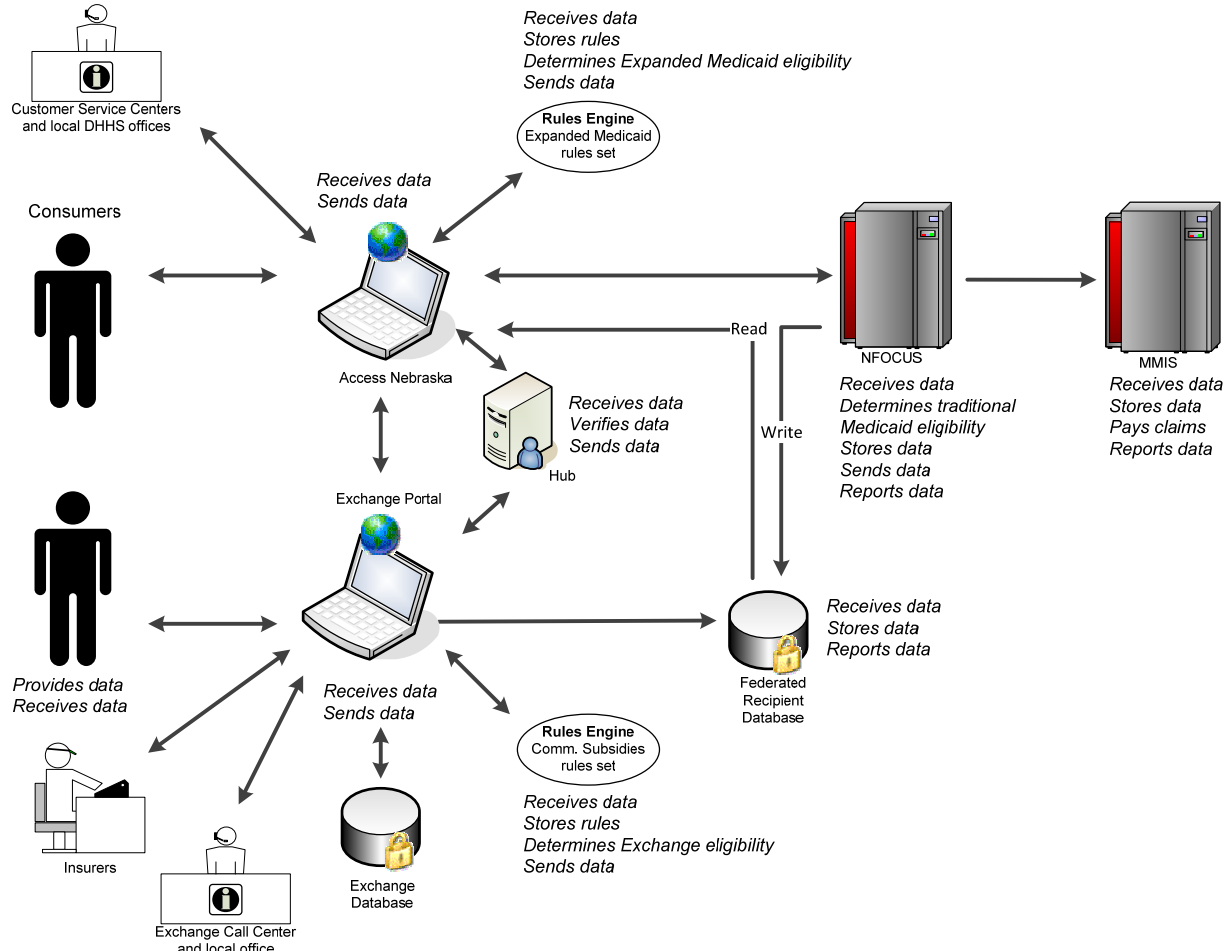
It is important to note that these alternatives were developed in the midst of a rapidly changing health care reform environment characterized by several unknowns. Regulations are still in the making and functionality, such as the federal hub for validating personal information and federal exchange services, is not fully defined. This leaves the role the federal government will perform unclear at a time when critical decisions need to be made by the states. Dealing with this uncertainty and working under the assumption that Nebraska would offer a state-based Exchange, four viable alternatives were developed for the NDOI and the Nebraska DHHS. These are presented on the following pages.

#### **Alternative 1 – Centralizing the Rules and Member Data**

Alternative 1 introduces the use of a business rules engine to store the Modified Adjusted Income (MAGI) rules and determine eligibility for the commercial insurance subsidies and expanded Medicaid. The rules engine would house these rules in separate sets that would be accessible to the Exchange portal and AccessNebraska. Eligibility determination for traditional Medicaid eligibility would remain in N-FOCUS. Recipient data for the commercial subsidies would be stored in an Exchange database. Recipient data for Medicaid, including expanded Medicaid, would be stored in N-FOCUS. To determine whether an applicant is already receiving publicly subsidized coverage (commercial subsidies or Medicaid) recipient data would be copied to a federated recipient



database that would be accessible to the front-end portals. The front-end web portal would verify applicant data through the federal hub. The MMIS would pay Medicaid claims, including those for expanded Medicaid.

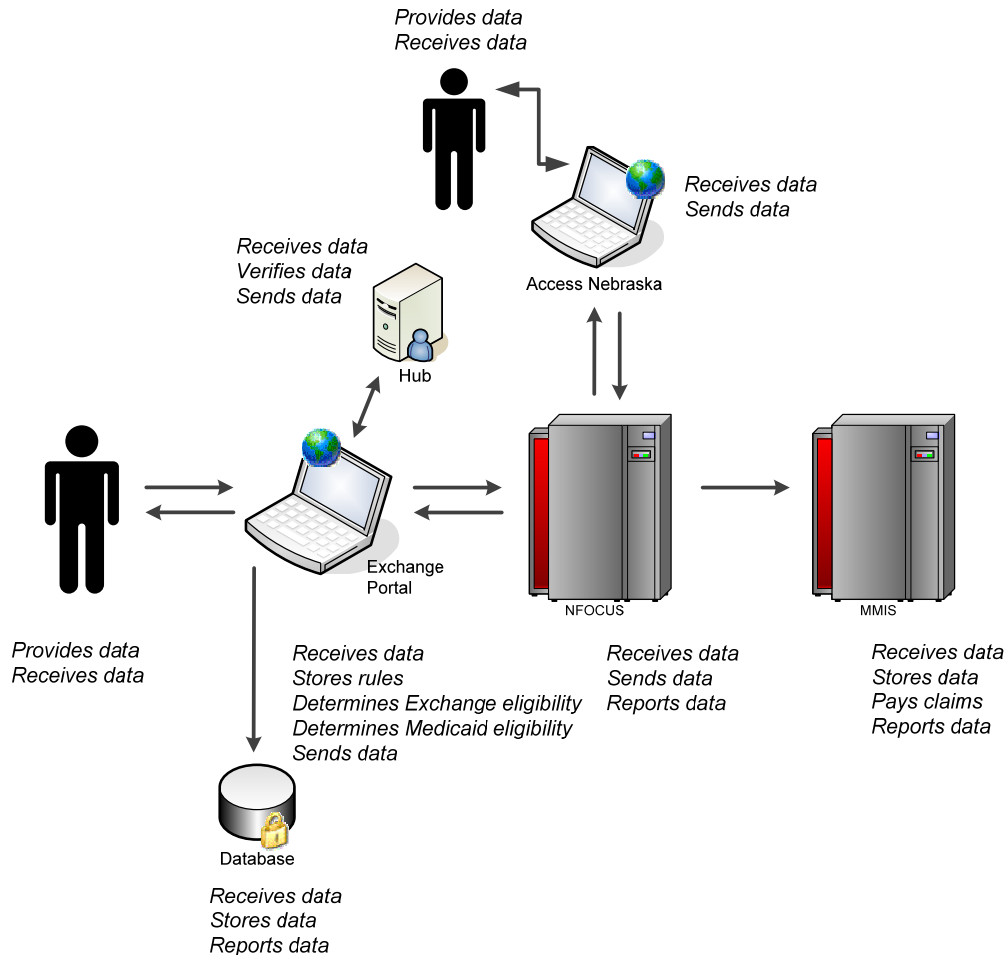


**Figure 5-1: Alternative 1 – Centralizing the Rules and Member Data**

### **Alternative 2 – Determining Eligibility in the Exchange Portal without a Rules Engine**

Alternative 2 does not include the use of a rules engine and stores all of the MAGI rules in the Exchange portal, which would function to determine eligibility for commercial insurance subsidies and expanded Medicaid, and validate applicant data through the federal hub. Recipients seeking commercial insurance subsidies would be limited to using the Exchange portal; AccessNebraska would not support any eligibility determinations based on the MAGI rules. Recipient data for Medicaid, including expanded Medicaid, would be stored in N-FOCUS. Recipient data for the commercial insurance subsidies would be stored in the Exchange database. To determine whether an applicant is already receiving

publically subsidized coverage (commercial subsidies or Medicaid) the portal would need to search both N-FOCUS and the Exchange database. The MMIS would pay Medicaid claims, including those for expanded Medicaid.



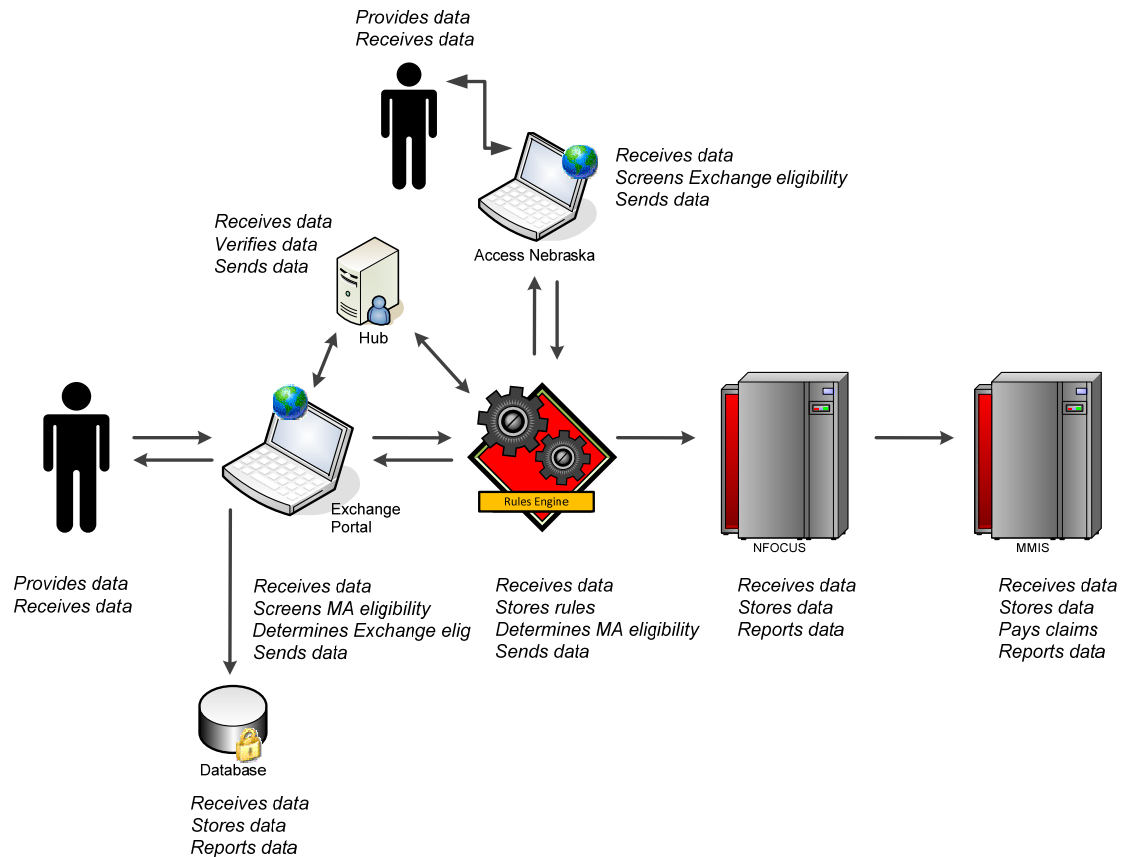
**Figure 5-2: Alternative 2 – Determining Eligibility in the Exchange Portal without a Rules Engine**

### **Alternative 3 – Decentralizing MAGI Eligibility Determination**

Alternative 3 is similar to Alternative 1 with the introduction of a business rules engine, but introduces an applicant screening function in the front-end portals and places the eligibility determination processes for expanded Medicaid and the commercial insurance subsidies in different places. In this alternative, the rules engine would determine eligibility for expanded Medicaid. The Exchange web-portal would determine eligibility for the commercial insurance subsidies. Eligibility determination for traditional Medicaid eligibility would remain in N-FOCUS. Recipient data for the commercial subsidies would be stored in an Exchange database. Recipient data for Medicaid, including expanded Medicaid, would be stored in N-FOCUS. To determine whether an applicant is already



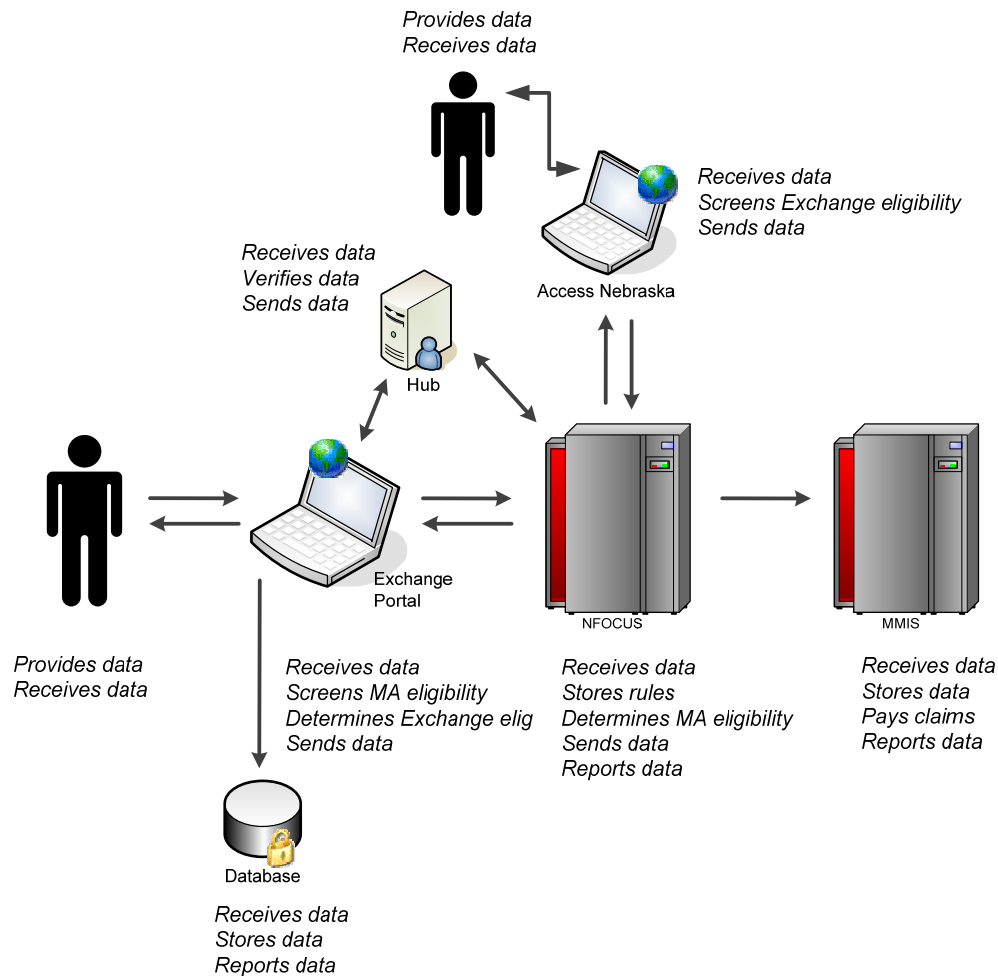
receiving publically subsidized coverage (commercial subsidies or Medicaid) both N-FOCUS and the Exchange database would be searched. The Exchange portal and the rules engine would verify applicant data through the federal hub. The MMIS would pay Medicaid claims, including those for expanded Medicaid.



**Figure 5-3: Alternative 3 – Decentralizing MAGI Eligibility Determination**

### Alternative 4 – Building the Rules into N-FOCUS

In alternative 4, the MAGI rules would be stored in N-FOCUS to determine eligibility for expanded Medicaid. The most significant differentiator between this alternative and the others is that it would require the replacement of N-FOCUS because the system does not meet CMS' enhanced funding requirements (see footnote 12). This alternative also stores the MAGI rules in the Exchange portal to determine eligibility for the commercial insurance subsidies. Eligibility determination for traditional Medicaid eligibility would remain in N-FOCUS. Recipient data for the commercial subsidies would be stored in an Exchange database. Recipient data for Medicaid, including expanded Medicaid, would be stored in N-FOCUS. To determine whether an applicant is already receiving publically subsidized coverage (commercial subsidies or Medicaid) both N-FOCUS and the Exchange database would be searched. The Exchange portal and N-FOCUS would verify applicant data through the federal hub. The MMIS would pay Medicaid claims, including those for expanded Medicaid.



**Figure 5-4: Alternative 4 – Building the Rules into N-FOCUS**

High-level cost estimates for one-time development and ongoing maintenance and operations (M&O)<sup>16</sup> for the alternatives discussed above appear in the table below.

**Table 5-1: One-Time Development and M&O Cost Estimates for the Viable Alternatives**

Alternative	One-Time Development Costs	Ongoing Annual M&O Costs
1 – Centralizing Rules and Member Data	\$7.6 million	\$1.2 million
2 – Determining Eligibility in the Exchange Portal	\$2.3 million	\$352,000
3 – Decentralizing MAGI Eligibility Determination	\$6.5 million	\$976,000
4 – Building the Rules into N-FOCUS	\$17.1 million	\$2.6 million

<sup>16</sup> Cost estimates reflected in Table 5-2 do not include the costs associated with administrative overhead, planning services, infrastructure, hardware and software costs, training, customer service center, and Independent Verification and Validation (IV&V) services.

The pros and cons associated with each one of the alternatives are provided in the table below.

**Table 5-2: Alternatives Comparison**

Alternatives	Pros	Cons
<b>1 – Centralizing Rules and Member Data</b>	<ul style="list-style-type: none"> <li>• Applies a modular, flexible approach to systems development</li> <li>• Separates the business rules from the rest of the applications, and enables the rules to be accessible and adaptable</li> <li>• Ensures seamless coordination between Medicaid and the Exchange</li> <li>• Stores recipient data for both the commercial insurance subsidies and expanded Medicaid in a single repository</li> <li>• Leverages functionality of current systems</li> <li>• Minimizes impact on, and investment in existing legacy systems</li> <li>• Supports Nebraska’s “multiple right doors” approach</li> <li>• Facilitates efficient “look-up” of recipients who may already be receiving services and/or benefits</li> <li>• Begins to move Nebraska towards a Service Oriented Architecture (SOA) approach</li> </ul>	<ul style="list-style-type: none"> <li>• Requires modifications to existing legacy systems that need to be replaced.</li> <li>• Somewhat costly in comparison to other alternatives because it requires the purchase and development of new technologies</li> </ul>

Alternatives	Pros	Cons
<b>2 – Determining Eligibility in the Exchange Portal without a Rules Engine</b>	<ul style="list-style-type: none"> <li>• Stores the business rules in a single location</li> <li>• Leverages functionality of current systems</li> <li>• Minimizes impact on existing legacy systems</li> <li>• Model could support pursuing some Exchange services at the federal level, depending on the functionality (i.e., providing a common set of MAGI business rules as a service) that will be afforded.</li> <li>• Lowest cost</li> </ul>	<ul style="list-style-type: none"> <li>• Access to the business rules is limited</li> <li>• Business rules are not isolated from the rest of the applications</li> <li>• Limits user ability to access MAGI-based programs through AccessNebraska</li> <li>• Does not create a single repository that stores recipient data for both the commercial insurance subsidies and expanded Medicaid</li> <li>• Does not facilitate an efficient “look-up” process to identify recipients who may already be receiving services and/or benefits</li> <li>• Does not distinguish a centralized source to access the federal hub</li> </ul>
<b>3 – Decentralizing MAGI Eligibility Determination</b>	<ul style="list-style-type: none"> <li>• Applies a modular, flexible approach to systems development</li> <li>• Separates the business rules from the rest of the applications, and enables the rules to be accessible and adaptable</li> <li>• Begins to move Nebraska towards a Service-Oriented Architecture (SOA) approach</li> </ul>	<ul style="list-style-type: none"> <li>• Eligibility determination for MAGI-based programs is not centralized in one location</li> <li>• Does not create a single repository that stores recipient data for both the commercial insurance subsidies and expanded Medicaid</li> <li>• Does not facilitate an efficient “look-up” process to identify recipients who may already be receiving services and/or benefits</li> </ul>

Alternatives	Pros	Cons
<b>4 – Building the Rules into N-FOCUS</b>	<ul style="list-style-type: none"> <li>Model could support pursuing some Exchange services at the federal level, depending on the functionality (i.e., providing a common set of MAGI business rules as a service) that will be afforded.</li> </ul>	<ul style="list-style-type: none"> <li>N-FOCUS does not meet CMS' Seven Conditions and Standards for enhanced funding. Because of the extent of modification that would be required, N-FOCUS would need to be replaced, into which the expanded Medicaid rules would be incorporated.</li> <li>Highest cost</li> <li>State would not be able to replace N-FOCUS by October 2013</li> <li></li> <li>Determines eligibility in different places</li> <li>Does not distinguish a centralized source to access the federal hub</li> <li>Business rules are not isolated from the rest of the applications</li> <li>Does not facilitate an efficient "look-up" process to identify recipients who may already be receiving services and/or benefits</li> </ul>

## 5.2. Selecting the Recommended Solution

To evaluate these alternatives, PCG used a set of criteria that is primarily based upon the architectural principles<sup>17</sup> set forth by the Center for Consumer Information and Insurance Oversight (CCIIO) at CMS, which are presented and described in the following table.

**Table 5-3: Description of Evaluation Criteria**

Criteria Used	Description
System Integration	Applies a modular, flexible approach to systems development, including the use of open interfaces and exposed application programming interfaces, and the separation of business rules from core programming, available in both human and machine-readable formats. Ensures seamless coordination between Medicaid, CHIP, and the Exchange, and allows interoperability with health

<sup>17</sup> *Guidance for Exchange and Medicaid Information Technology (IT) Systems, Version 1.0*, November 3, 2010.

Criteria Used	Description
	information exchanges, public health agencies, human services programs, and community organizations providing outreach and enrollment assistance services.
Service-Oriented Architecture (SOA)	Employs common authoritative data sources and data exchange services such as but not limited to, federal and state agencies or other commercial entities.
Isolation of Business Rules	Uses standards-based business rules and a technology-neutral business rules repository. Enables the business rules to be accessible and adaptable by other states.
Security and Privacy	Supports the application of appropriate controls to provide security and protection of enrollee privacy.
Efficient and Scalable Infrastructure	Leverages the concept of a shared pool of configurable, secure computing resources.
System Performance	Ensures quality, integrity, accuracy, and usefulness of functionality and information. Provides timely information transaction processing, including maximizing real-time determinations and decisions. Ensures systems are highly available and respond in a timely manner to customer requests.
Time to Implement	Timeliness of implementation in accordance with the ACA requirements. State's ability to address scope of solution/system requirements by October 2013.
Cost	Minimizes impact on federal and state funding sources.

Each alternative was evaluated against, and assigned a rating of high, medium or low based on the degree to which it satisfied each criterion. The high, medium, and low ratings were defined as follows:

- High – the alternative meets the criteria to the fullest extent.
- Medium – the alternative meets some aspects of the criteria.
- Low – the alternative does not meet, or meets minimal aspects of the criteria.

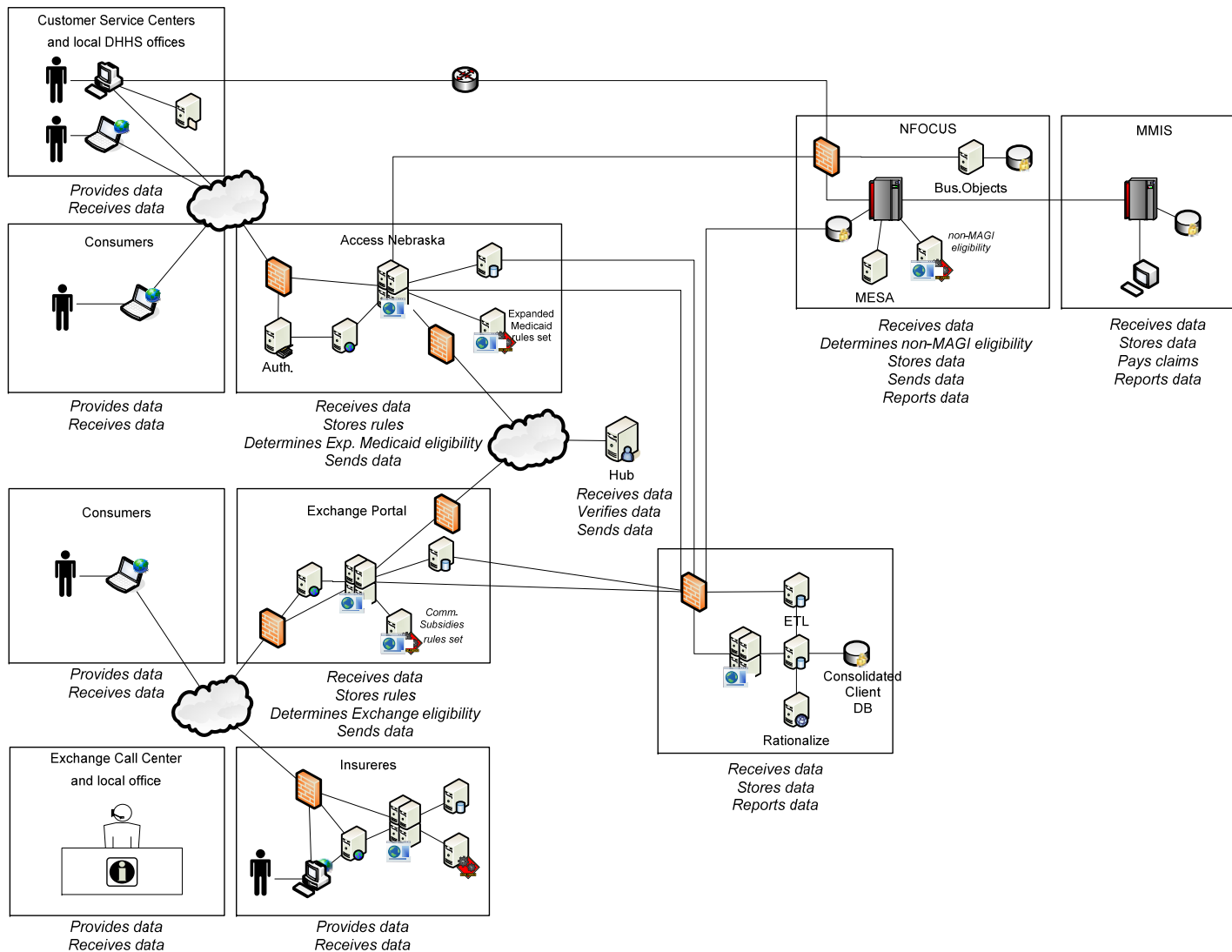
The comparison of the alternatives based on the above evaluation is provided in the table below.

**Table 5-4: Alternatives Comparison**

<b>Criteria / Alternative</b>	<b>#1: Centralizing Rules and Member Data</b>	<b>#2: Determining Eligibility in the Exchange Portal w/o a Rules Engine</b>	<b>#3: Decentralizing MAGI Eligibility Determination</b>	<b>#4 Building the Rules into N- FOCUS*</b>
System Integration	High	High	Medium	High
Service-Oriented Architecture (SOA)	High	High	High	High
Isolation of Business Rules	High	Low	Medium	High
Security and Privacy	High	High	High	High
Efficient and Scalable Infrastructure	High	Medium	High	High
System Performance	High	High	High	High
Time to Implement	Medium	High	Low	Low
Cost	Medium	High	Medium	Low

\* Assumes N-FOCUS would be replaced.

Based on the pros and cons, the project cost estimates, and the alternatives comparison based on the CCIIO's criteria, the NDOI and the Nebraska DHHS selected Alternative 1 – Centralizing the Rules and Member Data, as the recommended solution to meet the eligibility determination and enrollment requirements of ACA. While the current thinking may evolve as the ACA environment matures, the logical diagram for the recommended solution is presented in the figure on the following page.



**Figure 5-5: Logical Diagram for the Preferred Alternative**



The estimated costs and timeline for implementing the recommended solution are presented in the following section.

### **5.3. Estimated Cost for the Recommended Solution**

This section provides the high-level cost estimate for the recommended solution. The total estimated one-time cost is \$14,223,503. The annual ongoing IT-related cost is estimated at \$3,942,859.

#### **5.3.1. Costing Assumptions**

The assumptions that were made in developing the estimates for the one-time and ongoing costs are presented below.

##### **One-Time Cost Estimates**

###### **State Staffing Costs**

The state staffing cost estimate is \$1,444,800, which represents 15% of the total design, development and implementation (DD&I) cost. The state staffing costs are budgeted in January 2012 to coincide with the commencement of work on the existing system modifications and will continue through the life of the project. This estimate encompasses the state staffing costs at both the Nebraska DHHS and the NDOI.

###### **Planning Contractor Costs**

The planning contractor cost estimate is \$400,000. This will allow the NDOI and the Nebraska DHHS to seek outside consultants to develop the Implementation Advance Planning Document (IAPD) to obtain enhanced federal funding for the project and the Request for Proposal (RFP) to acquire a contractor for the DD&I of the business rules engine, federated database, and associated interfaces. A total of 2,500 hours at \$160/hour was estimated for these services.

###### **Design, Development and Implementation (DD&I) Costs for the Business Rules Engine and Federated Database**

The DD&I cost estimate is \$4,998,750 under the assumption that the State will acquire Commercial-off-the-Shelf (COTS) solutions for the business rules engine and the federated database. This work will be performed by an outside contractor that will be acquired through a competitive bidding process. DD&I for the business rules engine, federated database and associated interfaces will begin in July 2012 and end in October 2013, allowing for a 16 month DD&I cycle.

###### **DD&I Costs for Modifying the Existing Systems**

Software estimation techniques fall into three camps: counting artifacts, computation based on known information, and personal judgment. The first two techniques rely on quantitative measures to provide a basis for the estimate; the last technique relies solely on the experience of the estimator. Of the three

methods, counting and computation provide estimates with a higher degree of probability than just personal judgment.

Software application size is a key input to estimating the cost, effort, and schedule associated with the development of any complex application. The main objective of our methodology is to estimate the size of the application's required functionality in order to build the model. There are a number of techniques and numerous tools available for size estimation; many of which are included in available software cost models. It is generally recommended that small projects (usually, less than \$50K) use either a bottom up or top down estimate to generate a size estimate. For medium sized projects (\$50K to \$1M), a metric based approach should be employed (e.g. lines of code, function point, object point).

For larger projects it is appropriate to use two or more metric-based approaches and models and correlate the results. The most popular metric-based approaches for estimating software size are source lines of code (SLOC), function points (FP), and object points (OP). This was the original metric-based approach and was popularized by the Constructive Cost Model (COCOMO).

PCG's estimation methodology employs several metric-based models for estimating – Function Point Analysis, Analogy Model, and a proprietary variation of the Wideband Delphi Model. Once the metric-based models are created, PCG utilizes data from Software Productivity Research (SPR), a company founded by Capers Jones in 1984, which captures, analyzes, and calibrates the software development data and practices. Every year, SPR releases its industry reference Programming Language Tables (PLT), based on its extensive software development project data knowledge base. The PLT comparatively ranks language into levels along with correlation data for Function Point to source lines of code. Tapping into this knowledge base of historical software development data allows PCG to “fill in the blanks” when looking at software development projects in a variety of different languages and technologies.

The Function Point Analysis (FPA) model is an internationally recognized methodology developed by IBM for determining the overall size of a software application. It is one of the most common techniques for estimating management information system (MIS) application size. In its simplest terms, function points count the externally visible aspects of software products: inputs to an application, outputs from an application, user inquiries, the data files updated by the application, and the number of interfaces to other applications. These items are then weighted by their complexity – the relative difficulty of implementing each. Once adjusted by their complexity factors, the total of all these represent the function point count of the application.

The Analogy Model estimates program size by comparison with one or more software applications with a similar user base and scope of business process support. The list of candidate comparable applications is culled from several sources: for public sector application development, the costs for other state's

similar implementations; for private sector applications, the cost data for similarly sized, functionally equivalent systems.

The last model is an experiential-based model maintained by PCG – Technology Consulting based on their experience of working as a Quality Assurance and Independent Verification and Validation (IV&V) consultant on a number of government and private sector systems.

We use these results to provide estimated project effort, scheduling, and costs.

Each model produces an independent high and low cost estimate for the development of the application. After close examination of the range of estimates based on the different models and approaches, a consensus estimate is reached using triangulation based on the low and high estimates from all models. This approach is very similar to the Wideband Delphi technique (team based, collaborative estimating) with the exception that the independent estimates were based on metrics based models. By triangulating all these separate data points, we are able to double-check and validate our estimations.

The DD&I cost estimate for modifying the existing systems and building the new systems to support the ACA requirements is \$2,633,250, based on information (i.e., level of effort) provided by IS&T and cost estimation techniques described above. These estimates are based on an internal rate of \$75/hour and contractor rates of \$150/hour. DD&I to modify the existing systems is scheduled to begin in January 2012, and will be completed by IS&T staff with a complement of contractor positions.

### **DD&I Cost for Enhancing the Customer Service Center**

The DD&I cost estimate for enhancing the Customer Service Center is \$150,000, based on information provided by the Nebraska DHHS and adjusted by PCG to allow for contingencies. The total estimated cost to complete the coding changes is based on 1,200 hours at \$125/hour. The DD&I timeframe for the Customer Service Center enhancements is scheduled to begin in October 2012.

### **Infrastructure Costs**

The infrastructure cost estimate is \$1,329,215, based on information provided by the Nebraska DHHS and covers items such as workstations, telephone, computers, supplies, and equipment. This estimate captures what would be required to support the completion of the systems modifications (\$590,015) and enhance the Customer Service Center (\$739,200).

### **Hardware Costs**

The hardware costs estimate was determined to be \$682,538 based on the assumption that the OCIO will host the new technologies and to ensure that the necessary hardware will be in place.

### **Software Costs**

The software cost estimate is \$1,981,750, which is for a COTS business rules engine based upon vendor quotes received.

### **Staff Training Costs**

The staff training cost estimate is \$125,000, which includes the cost of obtaining business rules engine training for up to 10 technical staff (\$75,000) and for training staff in the Customer Service Centers (\$50,000).

### **Independent Verification and Validation Costs**

The Independent Verification and Validation (IV&V) cost estimate is \$778,200, which represents 10% of the DD&I cost estimate.

## **Ongoing Cost Estimates**

### **Maintenance and Operations (M&O) Costs**

Ongoing M&O is scheduled to begin in October 2013.

- Annual DD&I maintenance represents 15% of the estimated DD&I cost.
- Annual hardware maintenance represents 20% of the estimated hardware cost.
- Annual software maintenance represents 22% of the estimated software cost.

### **State Data Center Costs**

The annual State Data Center cost was estimated at \$987,167, which was provided by the Nebraska DHHS and represents computer processing charges that will be incurred to support the new populations.

### **Customer Service Center Costs**

The annual Customer Service Center infrastructure cost was estimated to be \$1,131,900, which was provided by the Nebraska DHHS and represents the costs associated with telephones, computers, supplies and rent.

This estimate does not include the ongoing Customer Service staffing cost that was estimated to be \$5,131,527, based on Nebraska DHHS' annual salaries and benefits for 100 social service workers and 10 supervisors that would be funded through the FMAP process

### **Printing and Postage Costs**

The annual printing and postage costs were estimated to be \$84,000, which is based upon 200,000 notices at .42/notice.

The total estimated project costs are broken out by State Fiscal Year (SFY) in the table below.

**Table 5-5: Estimated Project Costs by Fiscal Year**

Cost Item	FY 2011/12	FY2012/13	FY2013/14	Total One-Time Costs	Ongoing Costs
<b>One-Time Costs:</b>					
State Personnel	\$312,218	\$624,436	\$208,145	<b>\$1,444,800</b>	
Planning Contractor	\$400,000	\$0	\$0	<b>\$400,000</b>	
DD&I:					
BRE / Federated Database	\$0	\$3,749,063	\$1,249,688	<b>\$4,998,750</b>	
System Modifications	\$1,026,968	\$1,204,712	\$401,571	<b>\$2,633,250</b>	
Customer Service Center		\$112,500	\$37,500	<b>\$150,000</b>	
Infrastructure	\$664,607	\$664,607	\$0	<b>\$1,329,215</b>	
Hardware	\$0	\$682,538	\$0	<b>\$682,538</b>	
Software	\$0	\$1,981,750	\$0	<b>\$1,981,750</b>	
Staff Training	\$0	\$125,000	\$0	<b>\$125,000</b>	
IV&V	\$0	\$583,650	\$194,550	<b>\$778,200</b>	
<b>Total One-Time Cost</b>	<b>\$2,403,793</b>	<b>\$9,728,256</b>	<b>\$2,091,454</b>	<b>\$14,223,503</b>	
<b>Ongoing Costs:</b>					
DD&I Maintenance			\$778,200		<b>\$1,167,300</b>
Hardware Maintenance			\$91,005		<b>\$136,508</b>
Software Maintenance			\$290,657		<b>\$435,985</b>
State Data Center Costs			\$658,111		<b>\$987,167</b>
Customer Service Center Infrastructure			\$754,600		<b>\$1,131,900</b>
Printing / Postage			\$56,000		<b>\$84,000</b>
<b>Ongoing Costs</b>			<b>\$2,628,573</b>		
<b>Total Annual Ongoing Cost</b>					<b>\$3,942,859</b>

### 5.3.2. Sustainability

The ACA requires Exchanges to be self-sustaining by the end of 2015. As indicated in Table 5.3 above, the annual ongoing IT costs for the Exchange,

comprised of maintenance, infrastructure, and printing/postage costs, are estimated to be \$3.9 million. This estimate does not include the ongoing cost of staffing the Nebraska DHHS' Customer Service Center to support an increased volume of incoming calls. While there may be merits to leveraging the existing Call Center to support the expanded Medicaid population, the State should pursue the competitive bidding process to provide a basis upon which to evaluate this option.

#### 5.4. Potential Exchange Solutions in the Marketplace

In March of 2011, the NDOI issued a Request for Information (RFI)<sup>18</sup> to identify IT solutions in the marketplace that could meet the Exchange's business needs and better understand the associated costs. Above and beyond the eligibility determination and enrollment processes, the business functions that the Exchange must perform fall into the areas of plan management, financial management, customer service, communications and oversight<sup>19</sup>.

The NDOI received five responses to their RFI and have attended several meetings with vendors as an outcome of this exercise. While this experience allowed the NDOI to vet its requirements and obtain a better understanding of the marketplace, the most prominent finding was that many vendors are in a position not dissimilar to those in the state government – with regulations in flux and business demands unclear, it is difficult to develop and price new applications. At this point, “vaporware” is prolific and vendors looking to partner are in abundance. While some vendors tout strong web-based insurance shopping experience, others bring expertise in Medicaid and CHIP eligibility and enrollment processing. Both state hosted and Software as a Service (SaaS) IT solutions are in the offing. All claim to be flexible, scalable and adaptable. While the Congressional Budget Office (CBO) report<sup>20</sup> to the House of Representatives estimated that Exchange start-up costs would approximate \$2 billion nationwide (or \$40 million for each state if divided equally among the states) we are seeing costs ranging anywhere from \$4 - \$120 million<sup>21</sup>, excluding plan management (e.g., plan certification, rating and monitoring), financial management (e.g., plan assessment, reinsurance, risk adjustment, and risk corridors), governance, and other critical needs of an Exchange.

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<sup>18</sup> PCG was not involved in the RFI process.

<sup>19</sup> US Department of Health and Human Services, Centers for Medicare and Medicaid Services, Exchange Reference Architecture: Foundation Guidance, March 16, 2011.

<sup>20</sup> Dated March 20, 2010.

<sup>21</sup> Vendor response to Nebraska's RFI that offered a SaaS solution was \$4 million; start up costs for the Massachusetts Health Insurance Connector Authority were estimated at \$25 million; Texas Health and Human Services Commission's preliminary estimate of \$120 million for the establishment of the web portal and information technology systems based on projected population. If using Nebraska's projected population, estimate may equate to approximately \$17.8 million.



## 5.5. Proposed Timeline

This section provides a proposed timeline for performing the activities that will be required to acquire, design, develop and implement the IT solution to support the Exchange by October 2013. The underlying assumptions that were used in developing the timeline are stated below:

- In order for the State to implement the IT solution to support the Exchange, ongoing support and commitment will be required from executive level management in the Administration, the Nebraska DHHS and the NDOI.
- The timeline encompasses the planning activities (development of the Level One Establishment Grant Application, an Implementation Advanced Planning Document (IAPD), and a Request for Proposal (RFP) in order to secure funding for, and acquire assistance from, a vendor to design, develop, and implement the solution) as well as the design, development and implementation (DD&I) of the recommended solution.
- The NDOI and the Nebraska DHHS will seek assistance from an outside vendor to develop the IAPD and the RFP.
- The procurement strategy for acquiring the technical solution has not been determined. For the purposes of the estimated schedule, it is assumed that one RFP will be released, seeking a vendor to design and develop the new technologies and coordinate with the IS&T in regards to the existing system modifications.
- The DD&I for the business rules engine and the federated database will span 16 months. In order for this to occur, the State will acquire COTS solutions for these applications rather than pursuing in-house development.
- The DD&I for modifying the existing systems will start in January 2012 and once a vendor comes on board, will be performed in parallel with the DD&I for the business rules engine / federated database in order to allow sufficient time for development and to meet the implementation deadline of October 2013.
- Five day review cycles will be allowed for the NDOI / Nebraska DHHS review and finalization of documents prepared.
- Sixty-day review cycles will be allowed for federal agency review of the Level One Grant Application, the IAPD and the RFP.
- The development of the RFP will commence with CMS' review of the IAPD.

The proposed timeline is presented on the following page.

**Table 5-6: Estimated Implementation Timeline**

<b>Milestone</b>	<b>Start</b>	<b>Duration</b>	<b>Finish</b>
Develop Level One Grant Application to secure HIX funding	September 1, 2011	3 weeks	September 23, 2011
NDOI / Nebraska DHHS review	September 23, 2011	1 week	September 30, 2011
Submit to HHS	September 30, 2011		
HHS review and approval	September 30, 2011	2 months	November 30, 2011
Develop the IAPD to obtain Medicaid / CHIP funding	September 1, 2011	3 weeks	September 23, 2011
NDOI / Nebraska DHHS review	September 23, 2011	1 week	September 30, 2011
Submit to HHS	September 30, 2011		
HHS review and approval	September 30, 2011	2 months	November 30, 2011
Select planning vendor through competitive bid process	September 6, 2011		October 24, 2011
Develop RFP	October 31, 2011	3 months	December 30, 2011
NDOI / Nebraska DHHS review	January 2, 2012	1 week	January 6, 2012
Submit to HHS	January 9, 2012		
HHS review and approval	January 2012	2 months	March 2012
Release RFP	March 1, 2012		
Receive vendor responses	March 2012	1 month	April 2012
Select vendor / contract award	April 2012	1 month	May 2012
CMS approval of contract	May 2012	2 months	July 2012
Design / develop	July 2012	13 months	July 2013
Test	July 2013	3 months	October 2013
Full Implementation	October 2013		