

State of Vermont

AOE Vermont Child Nutrition System Modernization Project – Independent Review Report Formal Acceptance

Prepared By: Barbara Cormier Date of Publication: 6/27/2014

AOE Vermont Child Nutrition System Modernization Project Formal Acceptance

| Oversight Project Manager: | Barbara Cormier | Project Sponsor: | Bill Talbott | | | | | |
|-------------------------------|--|--------------------------|-----------------------|--|--|--|--|--|
| Project Phase: | Project Phase: Planning – Independent Review | | | | | | | |
| Deliverables complete | ed and/or accepted? Yes | | | | | | | |
| 1. Independent R | eview Report | | | | | | | |
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| | | | | | | | | |
| | | | | | | | | |
| Were completeness an | nd correctness criteria es | stablished? Y | es | | | | | |
| If yes, do the delivera | bles meet the criteria? | Y | es | | | | | |
| What activities were | done to ensure acceptanc | ce? (testing, inspection | , peer review, etc.). | | | | | |
| Vendor presentation | to CIO, Project Sponsor | • & several AOE team | members | | | | | |
| | | | | | | | | |
| Overall comments: | | | | | | | | |
| None | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

Approvals

| Role | Name and Title | Signature | Date |
|-----------------------------------|------------------------------|-----------|------|
| Chief Information Officer | Richard Boes, CIO | | |
| EPMO Oversight Project Manager | Barbara Cormier, PMP, OPM | | |

Independent Review

Child Nutrition Program ~ Modernization .Net Upgrade Project

For the

State of Vermont Agency of Education

Submitted to the State of Vermont, Office of the CIO By

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06.26.14

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1. Executive Summary

The State of Vermont (State) Agency of Education (AOE) is proposing the upgrade and data migration to Colyar Consulting Group's (CCG) newest Child Nutrition Program system and Food Distribution Program. This is a migration from the current AOE hosted Oracle solution to a vendor hosted Software as a Service (SaaS) Microsoft SQL/.Net environment. This includes all of the child nutrition program modules, the food distribution module, as well as the most current versions of the accounting, security, and configuration modules.

The State and CCG are finalizing terms to migrate the Vermont hosted system to a SaaS SQL/ .net environment. The purpose of this independent review is to evaluate the IT activity costs, architecture and implementation plans.

1.1 Cost Summary

This Cost Summary is based on a upgrade proposal from CCG dated May 22, 2014 and a cost analysis created by Brian Townsend of AOE, May 2014. The State is choosing a software as a service (SaaS) model. With this model, CCG delivers thin client, web-based software on hosted servers in the cloud.

| IT Activity Lifecycle: | 10 Years Note that AOE estimated a 20 year (infinite) Lifecycle in the agency Cost Analysis |
|---|--|
| Total 10 year Lifecycle Costs: | \$2,277,150 |
| Total Implementation Costs: | \$360,550 |
| New Annual Operating Costs: | \$207,200 |
| Difference Between Current and New Operating Costs: | \$54,994 |
| Funding Source(s) and Percentage Breakdown if Multiple Sources: | Project funding is: |
| | Approximately 99% US Department of Agriculture Re-authorization funds |
| | 2. Approximately 1% AOE General Funds |

| Cost detail | Existing Oracle Solution | New SQL Solution - Purchase | New SQL Solution - SaaS |
|--------------------------------|-----------------------------|--------------------------------|----------------------------|
| Year 1 Proposal offer price | \$129,485 | \$376,766.00 | \$360,550.00 |
| Year 2 Total | \$129,485 | \$538,160.00 | \$207,200.00 |
| Year 3 Total | \$129,485 | \$283,200.00 | \$207,200.00 |
| Year 4 Total | \$129,485 | \$283,200.00 | \$207,200.00 |
| Year 5 Total | \$129,485 | \$283,200.00 | \$207,200.00 |
| Year 6-10 (assume 5% increase) | \$679,798.88 | \$1,486,800.00 | \$1,087,800.00 |
| Total Costs | \$1,327,226.38 | \$3,251,326.00 | \$2,277,150.00 |

1.2 Disposition of Independent Review Deliverables

| Deliverable | Highlights from the Review | | | |
|--------------------------------|---|--|--|--|
| Acquisition Cost Assessment | The cost of this implementation is \$360,550 . Moving to a new SaaS implementation and support will allow funding to come from 99% federal sources and 1% State AOE General Fund (GF). The State will receive the funds for this project from the US Department of Agriculture Re-Authorization funds. This fund source has been a consistent source for the last 10 years for AOE. If federal funds do not come through in Fall of 2014, then the AOE will need to cover the entire implementation cost of \$360,550 from the General fund. Currently four CNP modules are included in this proposal, plan and cost model. There is some question about the need for the FDP module. Immediate discussions should occur within the AOE business team to determine the scope, prior to contract signing. Removing one of the modules would lower the cost and decrease the implementation cost would be \$28,000 less and the ongoing software service cost would be \$3500/mo or \$42,000 less per year. | | | |
| | See Risk #19. | | | |
| rechnology Architecture Review | Support for the current Oracle architectural platform may have a limited shelf life with the vendor. Vermont is their only Oracle customer and CCG has communicated a strong preference to migrate the system to their SaaS SQL/.net solution. Moving to a cloud environment always presents risks regarding data residency, data privacy and data compliance. In the case of AOE Child Nutrition Programs, the data is sensitive but not identifiable, so these risks remain low. Moving from an Oracle to a SQL platform may also prove to be cost effective in the long run. A Service Level Agreement has not been received from the vendor yet. This must be reviewed prior to signing the proposal and contract. See Risk #22. | | | |
| Implementation Plan Assessment | CCG, the Child Nutrition Program Vendor, has been a vendor with the VT AOE for the past ten years. They have a solid reputation with AOE, and they have implemented many projects like this one with other states over the past 5 years. They have a solid implementation methodology and plan as outlined in the CCG Upgrade Proposal. The proposed plan extends for a year (263 days) using a module by module implementation with each module taking approximately three months. Consideration is given during | | | |

| | planning to ensure that modules will be implemented at a time that is convenient for the business and users. For example, the Summer Food Service Program would best be implemented outside the June/July/August timeframe. The actual start times and durations may change after initial project discussions. |
|---|---|
| Cost Analysis and Model for Benefit Analysis | This project and new system will have a 10 year total cost of \$2,277,150 Implementation will be \$360,550 (this does |
| | not include internal labor costs) with \$207.200 each |
| | subsequent year 2-5. The Cost Benefit Analysis reveals an |
| | IRR of 11% and a payback period of 3.86 years. The total 10 |
| | \$3,171,784. |
| Impact Analysis on Net Operating Costs | The operating costs will increase future yearly operating |
| | costs by \$77,715 . This is a 60% increase over current |
| | operating costs. |
| | The proposed solution will move support and maintenance |
| | of the software application from State staff to vendor staff. |
| | Any changes needed to the system to support USDA |
| | implemented by CCG. This will free up time for the CNP |
| | program staff to focus on the business instead of the |
| | technology and system. Year 2-5 operational staff costs will |
| | decrease from a current cost of \$29,457 to \$6757 yearly. |
| | This is a 77% decrease in internal AOE staff costs to maintain |
| | the CNP system. |
| | Note that to possibly reduce current operating expenses, |
| | AUE should consider procuring oracle licensing through the State DII enterprise licensing agreement. |

1.3 Identified High Impact &/or High Likelihood of Occurrence Risks

| | Risk | Risk | | | Reviewers |
|------|----------|--------------|---|-------------------------------|------------|
| Risk | Process | Knowledge | | | Additional |
| ID # | Group | Area | Risk Description | AOE Response | Comments |
| | | | | Action Item: AOE has already | |
| | | | | discussed this with CCG and | |
| | | Collect | AOE has not seen a demo of the SaaS CCG | will arrange for a demo prior | |
| 6 | Planning | Requirements | system. | to contract execution. | Agree |

| | | | The data migration requirements are | | |
|----|------------|---------------|--|--------------------------------|---------------------|
| | | | unclear. The proposal indicates that two | | |
| | | | prior years of SNP data and only one prior | | |
| | | | year of CACFP data will be migrated; | Action Item: AOE will work | |
| | | | Financial and USDA requirements require 5 | with CCG to ensure that | Agree; First choice |
| | | | vears of history for auditing and reporting. | required historical data is | is to migrate |
| | | | however if all years are not migrated, then | migrated. This will be | everything: |
| | | | the current system will need to be used to | included in contract | otherwise will need |
| | | Collect | access older data i.e. data from anything | deliverables prior to contract | to build a way to |
| 7 | Planning | Requirements | prior to 2012 | execution | support old system |
| | | | p | The 25 week schedule | |
| | | | | represents effort on specific | |
| | | | | tasks in CCGs proposal where | |
| | | | | AOF will be involved. This | |
| | | | | may be accurate OR may | |
| | | | | need to be expanded by | |
| | | | Cost of internal resource needs for | another 6 weeks depending | |
| | | | implementation should to be recalculated | on AOF business decision on | |
| | | Develop | The original cost was based on a 25 week | whether or not the EDP | |
| | | Human | schedule. The proposed schedule is 52 | module will be included in | |
| 14 | Planning | Resource Plan | weeks so the cost should be doubled | this project | Agree |
| 17 | 1 1011116 | nesource rian | Any Vermont specific changes beyond the | | 1.5100 |
| | | | items currently in the oracle system would | | |
| | | | he an additional costs once moved over to | | |
| | | | the new platform. Although this does not | | |
| | | | hannen often there may be some expenses | | Agree add a 10% |
| | | | expended to satisfy state specific | | contingency to |
| | | | requirements and there is nothing in the | AOF will identify funds to | maintenance costs |
| | | Plan | proposal or business case analysis to | include as a contingency for | increase from \$207 |
| 18 | Planning | Procurements | account for these items | such state specific changes | to \$227K |
| 10 | 1 1011118 | Trocurements | Current Proposal V3 includes the Food | This is an AOF business | 10 92271 |
| | | | Distribution Program (FDP) module | decision that needs to be | |
| | | Plan | however team interviews indicate module | agreed upon prior to | |
| 19 | Planning | Procurements | may not be necessary | contract execution. | Agree |
| | | | The current CCG platform does not | | |
| | | | currently have a contract in place. The | | |
| | | | service contract between CCG and AOF | AOF contractual staff has an | |
| | | | ended on Jan 31,2014. A personal services | amendment that is being | |
| | | | contract was drafted for the conversion to | routed internally to extend | |
| | | Plan | SOL as well as maintenance and support | the maintenance of the | |
| 20 | Planning | Procurements | however that contract was not signed | current system. | Agree |
| | | | | | |
| | | | CCG SaaS experience appears relatively new | | |
| | | Develop | and maintenance costs are high | | |
| 25 | Initiation | Charter | | | |

1.4 Other Key Issues

The current system is not covered under any maintenance contract, although work is underway to get a maintenance contract in place prior to commencing this proposed conversion. See risk #20.

| | Risk | | | | | Overal | |
|-----------|---------|----------------|------------------|--------|-------------|--------|-------------------|
| | Process | Risk Knowledge | | | Negative | 1 | IR suggested Risk |
| Risk ID # | Group | Area | Risk Description | Impact | Probability | Rating | Strategy |

| | | | | | | | If the system crashed |
|----|----------|-------------------|---|---|---|---|-----------------------|
| | | | | | | | tomorrow, there is |
| | | | The current CCG platform does not | | | | nothing in place to |
| | | | currently have a contract in place. The | | | | pay for required |
| | | | service contract between CCG and AOE | | | | support. Put a |
| | | | ended on Jan 31,2014. A personal | | | | separate personal |
| | | | services contract was drafted for the | | | | services contract in |
| | | | conversion to sql as well as | | | | place for now until |
| | | | maintenance and support, however | | | | the start of the |
| 20 | Planning | Plan Procurements | that contract was not signed . | Н | Н | Н | conversion project. |

CCG is aggressively advocating for this upgrade, as is the AOE staff. There are significant financial and system impacts if the AOE stays on the current platform, the biggest being that there is a possibility that the state could eventually operate in an unsupported environment if this migration and upgrade to SQL/.net doesn't happen.

1.5 Recommendation

If the State executes the risk responses identified in the risk register (Attachment 2), Mincar Consulting recommends moving ahead with the migration of the AOE CNP systems to the proposed SQL/.net architecture.

1.6 Certification

I hereby certify that this Independent Review Report represents a true, independent, unbiased and thorough assessment of this technology project/activity and proposed vendor(s).

Signature

Date

2. Scope of this Independent Review

2.1 In-Scope

The scope of this document is fulfilling the requirements of Vermont Statute, Title 3, Chapter 45, §2222(g):

The Secretary of Administration shall obtain independent expert review of any recommendation for any information technology initiated after July 1, 1996, as information technology activity is defined by subdivision (a)(10), when its total cost is \$1,000,000 or greater or when required by the State Chief Information Officer.

The independent review report includes:

- An acquisition cost assessment
- A technology architecture review
- An implementation plan assessment (which includes a Risk Analysis)
- A cost analysis and model for benefit analysis; and
- An impact analysis on net operating costs for the Agency carrying out the activity

2.2 Out-of-Scope

Any subject not contained in section 2.1 is considered Out of Scope for the Review.

A separate deliverable contracted as part of this Independent Review may be procurement negotiation advisory services, but documentation related to those services are not part of this report.

3. Sources of Information

| Name | Employer and Title | Project Role |
|-----------------|---------------------------------|-----------------------------------|
| Bill Talbott | Agency of Education, | Project Sponsor |
| | Deputy Secretary and CFO | |
| Brian Townsend | AOE, IT Director | Project Stakeholder, |
| | | IT Team |
| Kathy Flanagan | AOE, Reporting and Payments | Project Stakeholder, |
| | Accounting Manager | Finance Team |
| Laurie Colgan | AOE, Child Nutrition Program | Program Implementation Team |
| | Team | |
| Nancy Lewis | AOE, Child Nutrition Program | Project Coordinator - |
| | Team | Implementation Team |
| Katy Beauchamp | AOE, Reporting and Payments | Finance Implementation Team |
| | Accountant | |
| Michael Morey | DII, Enterprise Architecture | Technical Architecture review |
| | Manager | and iTOP compatability |
| Richard Roekner | CCG, Vice President of Business | Project Contact for AOE |
| | Development | |
| Jeff Colyar | CCG, President | Project Oversight / CCG Executive |
| | | and owner |
| Guy Williams | State of Connecticut | CCG Reference |
| Wooton, Karen | State of Missouri | CCG Reference |

3.2 Independent Review Documentation

| Document Name | Description | Source |
|--|-----------------------------------|--------------|
| CCG VT Upgrade Proposal V1, V2 and V3 | Colyar Consulting Group | AOE (V1&V2) |
| | Implementation Proposal. A | and CCG (V3) |
| | scope, schedule and cost estimate | |
| | from the vendor for the | |
| | installation of the newest Child | |
| | Nutrition Program System and | |
| | Food Distribution Program | |
| AOE_CNPModernization_ABCForm_Calculations | IT Activity Business Case & Cost | AOE |
| | Analysis . Project Cost Analysis | |
| | Form dated 4/23/14 original | |
| | version by Brian Townsend | |
| eSignedAOE_Child_Nutrition_Modernization-IT- | DOE Internal Implementation Cost | DII |
| ABC-Form | Spreadsheet Internal Assessment | |
| | of implementation cost | |

| ROI_CNP_060414 | Cost Analysis Spreadsheet created | Mincar |
|------------------------------------|-----------------------------------|------------------|
| | by Mincar Consulting | Consulting |
| Project Team member interviews | Notes from the IR team interviews | Mincar |
| | | Consulting |
| Internal Memos and Emails | Various emails regarding the | DII & SharePoint |
| | history of the project | |
| IR Pharmacy Benefits Mgmt Solution | Other IR to use as a reference | DII & SharePoint |

4. Project Information

4.1 Historical Background

In 2001, there was a directive from the State CIO for all systems in the State of Vermont to be built in Oracle. Because of this directive, Colyar built an Oracle solution of their CNP systems specifically for Vermont. In 2001, There was also a directive to have these systems in house, so the AOE bought and maintained the systems using nine VM servers and associated storage. There is a total of eleven VMs in place:

- 1. Development App Server
- 2. Development dB server
- 3. Production App Server
- 4. Production dB server
- 5. 2 middle tier servers
- 6. 2 infrastructure servers
- 7. 3 servers for storage

Since 2001, maintenance patches are being sent to AOE and AOE IT tests and applies the patches on each environment.

The vendor has indicated that they no longer wish to support the Oracle environment, their preference is to move AOE to the new environment. They stated that they would continue to provide support should an upgrade not happen, however, there could be security issues with ASP on Oracle and the current environment is missing key regulatory functions, like the

Community Eligibility program, that the AOE would have to do manually to make it available on Oracle. In addition, staffing and costs for both the State and CCG may go up if an upgrade doesn't happen. CCG is requesting that the AOE consider an upgrade to a SQL/.net solution. CCG submitted a proposal to DOE for consideration.

The three AOE options being considered are:

- 1. Upgrade / migrate to a new environment using the same vendor w a SaaS model
- 2. Upgrading / migrating to a new environment but purchase the software
- 3. Select an entirely different vendor and platform.

Converting to a new platform (Option 3), like Simmons or some other home-grown program, would take a tremendous amount of internal staff support and end-user user training.

Since the AOE has been successfully working with CCG for over a ten years and costs are projected to be reduced, the decision to move forward with a migration to a new CCG supported software and hardware platform (option 1) seemed appropriate by the AOE IT Director. This proposed platform solution is not unique to Vermont. The proposed solution has been successfully completed by CCG in Texas, Colorado, Kentucky,

Ohio, South Carolina and Tennessee. In the CCG proposal, using the SaaS solution is less expensive than purchasing the software (option 2), therefore that is the model that AOE recommends to move forward with.

4.2 Project Goals

The goals of this migration project are to:

- Ensure the maintenance and sustainability of IT Capabilities
 - o limprove sustainability and maintenance of USDA compliance on all modules
- Modernize Critical Technologies
 - Provide significant enhancements in both technology and functionality. The new .Net upgraded software contains advanced features that will align the state's new application and business processes to be similar and consistent with other states in the nation so that future updates become minimized in effort and cost.
- Enable Productivity Improvements through improved business processes
 - The new system will also provide an upgraded look-and-feel, which will provide ease of use as well as an aesthetically pleasing system.
- Maintain existing functionality
 - The processes and modules currently used by AOE will be in the new proposed solution
- Incur consistent, budgeted costs
 - Allow for easier budgeting with consistent operational system charges year 2-5.
- Lower the total cost of ownership.
 - Reduce the amount of internal staff time to maintain the CNP systems
- More closely align with the DII iTOP strategy.

4.3 Project Scope

The following modules are included in the migration proposal from CCG:

- Child and Adult Care Food Program (CACFP)
- Summer Food Service Program (SFSP)
- School Nutrition Programs (SNP) (Includes the Fresh Fruit & Vegetable Program)
- Food Distribution Program (FDP)

Note that VT AOE does not currently use the food distribution program (FDP). This program was managed by the VT Department of Children and Families but was recently moved to AOE. Right now the program is managed using a DCF homegrown Access dB and could be replaced by CCG Food distribution program. This module is included in the current proposal and cost model, however, further discussion needs to happen within the AOE team to finalize plans for this conversion. Removing the FDP module would lower the cost and decrease the implementation time. If the FDP module is not included, the implementation cost would be \$28,000 less and the ongoing software service cost would be \$3500/mo or \$42,000 less per year. This was identified as a high risk and should be finalized prior to contract signing.

| Risk ID # | Risk Process Group | Risk Knowledge Area | Risk Description | Impact | Negative Probability | Overall Rating | IR suggested Risk Strategy |
|-----------|--------------------------|---------------------------|--|--------|-------------------------|-------------------|--|
| 19 | Planning | Plan Procurements | Current Proposal V3 includes the Food Distribution Program (FDP) module, however team interviews indicate module may not be necessary | Н | н | Н | Determine if FDP should be part of the scope or not. |

Also included in the scope are the following enhanced core system modules:

- Accounting
- Security
- Configuration

Some of the highlights of the upgraded system are as follows:

- CACFP includes the Adult, Child, and Home programs.
- SNP includes the Fresh Fruit & Vegetable program.
- Support for site-level claims for all programs.
- Site level claim upload capability from third party systems.
- Enhanced accounting including advances processing.
- Improved building enrollment report.
- Improved security functionality that allows sophisticated grouping.
- Improved fresh fruit and vegetable program disbursement process.
- Updated look and feel.

Some of the highlights of the Food Distribution Program are as follows:

- Ordering and Receiving
- Inventory Management Control
- Allocation
- Special Allocation
- Distribution
- Processing
- Commodity Planning
- Entitlement Monitoring and Tracking
- Billing

Additional Information

- o Project Management
 - CCG's project management approach principles uses two methodologies on the project simultaneously:
 - Systems development methodology; and
 - Project management methodology.

The systems development methodology defines the phases and activities used to develop the solution. The project management methodology defines the phases and activities used to manage the project. CCG's project management methodology is aligned with the Project Management Institute's (PMI) Project Management Body of Knowledge (PMBOK[®]).

• Configuration and Customizations

- State-specific functions such as state payment programs and state match that already exist in the current system will be migrated to the new environment.
- Some configuration, like funding codes, will need to be done during the migration.
- Customizations after initial implementation will be extra and should be planned for.

| Risk ID # | Risk Process Group | Risk Knowledge Area | Risk Description | Impact | Negative Probability | Overall Rating | IR suggested Risk Strategy |
|-----------|--------------------------|------------------------|--|--------|-------------------------|-------------------|-------------------------------|
| | | | Any Vermont specific changes beyond | | - | | |
| | | | the items currently in the oracle system | | | | |
| | | | would be an additional costs once | | | | |
| | | | moved over to the new platform. | | | | |
| | | | Although it doesn' t happen often, | | | | |
| | | | there may be some expenses expended | | | | |
| | | | to satisfy state specific requirements | | | | Add a contingency in |
| | | | and there is nothing in the proposal of | | | | the maintenance |
| | | | business case analysis to account for | | | | budget for state |
| 18 | Planning | Plan Procurements | these items | М | Н | Н | specific requirements |

o Interfaces

- The financial export process from CCG into the State Visions system will be included in the new software.
- The interface/link for reporting to USDA will be available for AOE through the FDP module. If the FDP module isn't implemented, a manual export will need to be run.

o Hosting

 CCG offers hosting services through a third-party hosting facility in Dallas, Texas, with a disaster recovery site in Phoenix, Arizona. The hosting solution provides the technology infrastructure and environment to run the CCG software platform.

o Training

- A full day training session for VT AOE employees is included for each module and is included in the proposal pricing. Training for sponsor users is available and can be conducted on-site via webinars. Sponsor user training is not included in the proposal. There are about 300-500 users periodically logging in to the CCG system.
- Documentation
 - The following documentation is included in the pricing:
 - System documentation (specifications)
 - User Manuals (for each module)
 - On-line help

4.3.1 Major Product and Project Activities and Deliverables from the CCG Proposal

<u>Product Deliverables:</u> The following table identifies the major system development stages that are being proposed for this project. Each stage is repeated in each project rollout phase, meaning that each module implementation will go through these 5 stages and activities.

Description

| Startup Requirements | The project commences with a series of start-up activities that help establish the project environment. In the Requirements phase, the | Establish/update project environment. Conduct kickoff meetings. Finalize project schedule for respective phase. Conduct JAD sessions to validate and refine requirements and identify. |
|---|--|--|
| Anaiysis | defining and refining DOE's requirements and identifying gaps. Interactive JAD sessions are conducted with DOE's SMEs to better understand the current operating environment and how the system will integrate across the DOE's business and technical framework. | Review existing forms, reports and processes. Identify business rules. Identify data conversion and interface components. DOE commences data cleansing and mapping. Finalize Requirements Analysis. Establish Development environment. |
| Design | In this phase, the blueprint for the application structure, configurations, enhancements and system interfaces are defined. Interactive JAD design sessions with DOE SMEs are conducted to refine initial screens/outputs and determine system logic and flow, data conversions and system interfaces. | Finalize design modifications/enhancements. Review and update screen/output design. Validate business rules. DOE continues data cleansing. Complete data mapping. Define system interface rules. Define system security. Establish Development environment. |
| Development | In this phase, application configurations and extensions are developed, database updates are performed, system interfaces are built and data conversion programs are created. Coding is done according to specifications documented in the Design phase. | Develop system and interface modules. Develop data conversion software. Conduct follow-up sessions, if needed. Finalize database structure. DOE completes data cleansing. Conduct unit testing. DOE develops UAT scripts as needed. |
| Integration, Testing and Acceptance | In this phase, a series of testing activities are performed. The developed system is tested; defects are identified, prioritized, corrected, and re- tested; and test results reports are created. | Establish test environment. Conduct system/integration testing. DOE completes UAT script development as needed. Conduct UAT. Convert test data. |

| Implementation | In this phase, training sessions are conducted. In addition, the | • | Establish Training/Production environments. |
|----------------|--|-------|---|
| | final system is implemented and verified in accordance with the steps defined in the Transition Plan. Various manuals are finalized. | • • • | Develop and finalize training materials. Complete final database documentation. Conduct training sessions/workshops. Finalize manuals. |
| | | • | Perform "Go Live" activities. |

<u>Project Deliverables:</u> The project phases are identified in the Project Management Phases table below. This table describes each major phase of Colyar Consulting Group's project management approach, the activities and the deliverables.

| Phase | Description | Major Activities |
|------------------------|---|---|
| Initiation | The purpose of this phase is to develop the business case, obtain formal approval for the project, secure a Project Sponsor and develop the project charter. Since DOE completed this work prior to distributing the RFO, the major activity performed by the CCG Project Manager is the review of the project charter. | • Develop Project Charter. |
| Planning | The purpose of this phase is to develop the PMP, work plan, and other management tools (e.g., issue log, Risk Register, etc.). The PMP and work plan are considered "living" documents and are regularly reviewed by the CCG Project Manager and modified, as needed, based on new or refined information. | Develop supporting project management tools and templates. Develop master work plan. |
| Execution | The purpose of this phase is to complete the work defined in the project work plan and to meet the project's objectives. During this phase, the CCG Project Manager focuses on managing to the project schedule and overseeing the team's progress on project work products and deliverables. | Submit completed project deliverables. Conduct deliverable review. Conduct product review. Submit Deliverable Acceptance Document (DAD). |
| Monitor and Control | During this phase, the CCG Project Manager validates project progress against the defined schedule, monitors activities to ensure adherence to the PMP standards, change requests are managed appropriately and monitors quality assurance, control and improvement activities. | Develop status reports.Update work plans.Manage change requests. |
| Closeout | This phase formally terminates project phase activities. The CCG Project Manager and DOE Project Manager evaluate lessons learned, reconcile the project budget and prepare DOE for its transition into ongoing maintenance and support. A project closeout report is prepared and presented to the Executive Steering Committee (or appropriate group). | • Develop Project Closeout Report. |

The CCG project manager will need to work closely with the AOE project coordinator to ensure that responsibility for every product and project deliverable is clearly documented.

4.4 Project Phases, Milestones and Schedule

The project schedule below details project initiation tasks as well as the tasks required for implementing one module, in this case CACFP:

| Task Name | Start | Finish | Duration |
|---|--------------|--------------|----------|
| | | | |
| Vermont Dot Net System Implementation Plan | Mon 6/2/14 | Wed 6/17/15 | 273 days |
| Project Initiation | Mon 6/2/14 | Fri 6/6/14 | 5 days |
| Project Planning and Startup | Mon 6/2/14 | Fri 6/6/14 | 5 days |
| Project Kickoff Meetings | Mon 6/2/14 | Wed 6/4/14 | 3 days |
| Prepare for Initial Kickoff | Mon 6/2/14 | Tue 6/3/14 | 2 days |
| Conduct/Attend Project Kickoff | Wed 6/4/14 | Wed 6/4/14 | 1 day |
| Establish Project Environment | Thu 6/5/14 | Fri 6/6/14 | 2 days |
| Create share drive library | Thu 6/5/14 | Fri 6/6/14 | 2 days |
| Phase I (CACFP) | Thu 6/5/14 | Mon 10/20/14 | 98 days |
| Startup Phase | Thu 6/5/14 | Thu 6/5/14 | 1 day |
| Phase Kickoff Meeting | Thu 6/5/14 | Thu 6/5/14 | 1 day |
| Conduct Initial Kickoff with Team | Thu 6/5/14 | Thu 6/5/14 | 1 day |
| Requirements Phase | Thu 6/12/14 | Tue 7/1/14 | 14 days |
| Identify Business Processes | Thu 6/12/14 | Thu 6/12/14 | 1 day |
| Define Forms and Outputs | Fri 6/13/14 | Fri 6/13/14 | 1 day |
| Review/Define System Interfaces | Mon 6/16/14 | Mon 6/16/14 | 1 day |
| Review Data Conversion Requirements | Tue 6/17/14 | Tue 6/17/14 | 1 day |
| Updated Requirements and Gap Analysis | Wed 6/18/14 | Fri 6/27/14 | 8 days |
| Develop Updated Requirements and Gap Analysis | Wed 6/18/14 | Fri 6/20/14 | 3 days |
| Submit Draft Documents to DOE | Fri 6/20/14 | Fri 6/20/14 | 0 days |
| DOE Deliverable Review | Mon 6/23/14 | Tue 6/24/14 | 2 days |
| Update Document with DOE's Input | Wed 6/25/14 | Thu 6/26/14 | 2 days |
| DOE Formal Approval of Documentation | Fri 6/27/14 | Fri 6/27/14 | 1 day |
| Development Environment | Mon 6/30/14 | Tue 7/1/14 | 2 days |
| Establish Devlopment Environment | Mon 6/30/14 | Tue 7/1/14 | 2 days |
| Design Phase | Mon 6/30/14 | Wed 7/23/14 | 18 days |
| Review Define Form Designs | Mon 6/30/14 | Tue 7/1/14 | 2 days |
| Review/Define Business Rules | Wed 7/2/14 | Thu 7/3/14 | 2 days |
| Review/Design Reports | Fri 7/4/14 | Mon 7/7/14 | 2 days |
| Design System Interface | Tue 7/8/14 | Wed 7/9/14 | 2 days |
| Technical Desgn Specifications | Thu 7/10/14 | Mon 7/21/14 | 8 days |
| Develop Technical Specifications Documents | Inu //10/14 | Wed 7/16/14 | 5 days |
| Submit Draft Documents to DOE | Wed //16/14 | Wed //16/14 | 0 days |
| DOE Deliverable Review | Inu //1//14 | Thu 7/17/14 | 1 day |
| Doc Formel Annual of Desure ante | Fri // 18/14 | Fri 7/18/14 | I day |
| Test Environment | Tue 7/20/14 | Wed 7/22/14 | 1 day |
| Fatablish Tast Environment | Tue 7/22/14 | Wed 7/23/14 | 2 days |
| Establish Test Environment | Tue 7/22/14 | Eri 9/15/14 | 2 days |
| Configure/Ruild/Linit Test Software | Tue 7/22/14 | Mon 9/11/14 | 15 days |
| Build System Interfaces | Tue 7/22/14 | Mon 8/11/14 | 15 days |
| Build Benorts | Tue 7/22/14 | Mon 8/11/14 | 15 days |
| Build Data Conversion Software | Tue 7/22/14 | Mon 8/11/14 | 15 days |
| LIAT/Training and Production Environments | Tue 8/12/14 | Fri 8/15/14 | 4 days |
| Establish Test and Production Environments | Tue 8/12/14 | Wed 8/13/14 | 2 days |
| DOE Beview of Environments | Thu 8/14/14 | Thu 8/14/14 | 1 day |
| DOE Formal Approval of Completion of Environments | Fri 8/15/14 | Fri 8/15/14 | 1 day |
| Test Phase | Mon 8/18/14 | Mon 9/29/14 | 31 days |
| System & Integration Testing (SIT) | Mon 8/18/14 | Thu 9/4/14 | 14 days |
| Perform SIT Testing | Mon 8/18/14 | Fri 8/29/14 | 10 days |
| Document and Review Results with DOE | Mon 9/1/14 | Wed 9/3/14 | 3 days |
| DOE Formal Approval of SIT testing | Thu 9/4/14 | Thu 9/4/14 | 1 day |
| User Acceptance Testing (UAT) | Fri 9/5/14 | Mon 9/29/14 | 17 days |
| Execute User Acceptance Testing | Fri 9/5/14 | Tue 9/16/14 | 8 days |

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| Correct Defects | Wed 9/17/14 | Fri 9/19/14 | 3 days |
|---|--------------|--------------|----------|
| Continue to Retest | Mon 9/22/14 | Wed 9/24/14 | 3 days |
| DOE Document and Review Test Results | Thu 9/25/14 | Fri 9/26/14 | 2 days |
| DOE Formal Approval of UAT Test Completion | Mon 9/29/14 | Mon 9/29/14 | 1 day |
| Implementation Phase | Mon 8/18/14 | Mon 10/20/14 | 46 days |
| Phase Planning | Mon 8/18/14 | Mon 10/6/14 | 36 days |
| Training | Tue 9/30/14 | Mon 10/6/14 | 5 days |
| Deliver Training | Tue 9/30/14 | Mon 10/6/14 | 5 days |
| Conduct Training Sessions | Tue 9/30/14 | Mon 10/6/14 | 5 days |
| Deliver End User Manual | Mon 8/18/14 | Mon 9/8/14 | 16 days |
| Produce Manual | Mon 8/18/14 | Fri 8/29/14 | 10 days |
| DOE Deliverable Review | Mon 9/1/14 | Fri 9/5/14 | 5 days |
| DOE Formal Approval of Deliverable | Mon 9/8/14 | Mon 9/8/14 | 1 day |
| Deployment/Final Acceptance | Tue 10/7/14 | Tue 10/14/14 | 6 days |
| Prepare Final Production Environment for Deployment | Tue 10/7/14 | Wed 10/8/14 | 2 days |
| Convert Final Data into Production Environment | Thu 10/9/14 | Fri 10/10/14 | 2 days |
| DOE Review Production Environment | Mon 10/13/14 | Mon 10/13/14 | 1 day |
| Sponsor Readiness Go/No-Go decision on deployment o | Tue 10/14/14 | Tue 10/14/14 | 1 day |
| Final Deployment of System | Wed 10/15/14 | Mon 10/20/14 | 4 days |
| Final Pre-Production Steps | Wed 10/15/14 | Fri 10/17/14 | 3 days |
| Create DOE Login IDs | Wed 10/15/14 | Wed 10/15/14 | 1 day |
| Update Message Boards | Thu 10/16/14 | Thu 10/16/14 | 1 day |
| Activate DOE Help Desk Tools | Fri 10/17/14 | Fri 10/17/14 | 1 day |
| Distribute Login IDs | Thu 10/16/14 | Thu 10/16/14 | 1 day |
| Activate DOE Help Desk | Fri 10/17/14 | Fri 10/17/14 | 1 day |
| Rollout System to Users (Delivery of Software) | Mon 10/20/14 | Mon 10/20/14 | 1 day |
| Phase II (SFSP) | Tue 12/2/14 | Mon 5/4/15 | 110 days |
| Startup Phase | Tue 12/2/14 | Wed 12/3/14 | 2 days |
| Phase Kickoff Meeting | Tue 12/2/14 | Wed 12/3/14 | 2 days |
| Conduct Initial Kickoff with Team | Tue 12/2/14 | Wed 12/3/14 | 2 days |
| Requirements Phase | Thu 12/4/14 | Wed 12/24/14 | 15 days |
| Identify Business Processes | Thu 12/4/14 | Thu 12/4/14 | 1 day |
| Define Forms and Outputs | Fri 12/5/14 | Fri 12/5/14 | 1 day |
| Review/Define System Interfaces | Mon 12/8/14 | Mon 12/8/14 | 1 day |
| Review Data Conversion Requirements | Tue 12/9/14 | Tue 12/9/14 | 1 day |
| Updated Requirements and Gap Analysis | Wed 12/10/14 | Mon 12/22/14 | 9 days |
| Develop Updated Requirements and Gap Analysis | Wed 12/10/14 | Thu 12/11/14 | 2 days |
| Submit Draft Documents to DOE | Thu 12/11/14 | Thu 12/11/14 | 0 days |
| DOE Deliverable Review | Fri 12/12/14 | Tue 12/16/14 | 3 days |
| Update Document with DOE's Input | Wed 12/17/14 | Fri 12/19/14 | 3 days |
| DOE Formal Approval of Documentation | Mon 12/22/14 | Mon 12/22/14 | 1 day |
| Development Environment | Tue 12/23/14 | Wed 12/24/14 | 2 days |
| Establish Devlopment Environment | Tue 12/23/14 | Wed 12/24/14 | 2 days |
| | | | |

At a high level, the proposed timeline for each module is:

| Module | Start | Finish | Duration |
|----------------------------|----------|----------|----------|
| | | | |
| VT Child Nutrition Program | 6/2/14 | 6/17/15 | 273 days |
| project | | | |
| Initiation | 6/2/2014 | 6/6/14 | 5 days |
| CACFP | 6/5/14 | 10/20/14 | 98 days |
| SFSP | 12/2/14 | 5/4/15 | 110 days |
| SNP | 12/2/14 | 6/17/15 | 142 days |
| FDP | 10/21/14 | 4/23/15 | 133 days |

- Project Start Date: The proposal has a project start date of 6/2/14. This will be reworked to a date after the contract gets signed, either 7/1 or 8/1. All of the other modules implementation dates will need to be pushed back accordingly.
- Resources: Implementation of the modules overlap, which means that from 12/2/14 until 4/23/15 there will be four major implementations occurring at the same time. There are different business resources associated with each module, so the business side may be able to manage the work. The project coordinator and the operations (IT) staff will be involved in each implementation, therefore detailed planning of those resources should be done.

| | - | |
|--------------------------------|-----------|---|
| Acquisition Costs | Cost | Comments |
| Hardware and software Costs | \$0 | The new solution is a cloud-based, vendor |
| | | hosted solution and does not require |
| | | purchasing any new hardware or software. |
| Software Service Costs | \$164,000 | This includes the cost of all four program |
| | | modules as well as the accounting, security |
| | | and maintenance modules. It also includes |
| | | any additional software requirements for SQL |
| | | Server. There is no limit on the number of |
| | | users that can have access to the system |
| Implementation Services | \$106,000 | This cost covers the project management and |
| | | implementation specialists provided by CCG |
| | | on the project It includes configuration |
| | | changes, and the cost of implementing any |
| | | existing state-specific functions like state |
| | | payment programs and state match. |
| System Integration Costs | \$0 | The interface from CCG to the State Vision |
| | | system and to the USDA is included in the |
| | | implementation costs. |
| Professional Services (e.g. | \$0 | No additional costs associated with Project |
| Project Management, Technical, | | Management. One full-day AOE Training |
| Training, etc.) | | session is included for each module. Training |
| | | for sponsor users is available from CCG, but |
| | | AOE is opting to roll the new system training |
| | | into existing delivery methods using existing |
| | | training resources. |
| Hosting | \$43,200 | Hosting will be done at a CCG third-party |
| | | facility. Flexibility should be added in to the |
| | | contract to allow for migrating to a DII- |
| | | sanctioned cloud hosting facility, like Amazon |
| | | Cloud Hosting services, once DII has a contract |
| | | in place for hosting. |
| Data Conversion | \$47.350 | The data will need to be moved from an |

5. Acquisition Cost Assessment

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| | | Oracle dB to a SQL dB. The data is sensitive but not identifiable. It does not have any specific data compliance specifications. Any USDA specific software requirements, like the child nutrition dB, will be included in the software. |
|-------------------------|-----------|---|
| Total Acquisition Costs | \$360,550 | |

1. Cost Validation:

All Costs were validated using input from AOE staff, the CCG cost proposal, the ABC (Cost analysis) Form completed by Brian Townsend, the executives at CCG, and then discussed with the AOE Financial Director and Financial accountant.

2. Cost Comparison:

MO and CT are other state's that have implemented CCG; details and comparisons of their maintenance contracts can be seen below.

| Acquisition and Operation | VT - 2014 | CT – 2014 | MO - 2011 |
|-----------------------------|-----------------------------------|------------------------|-----------------------|
| Costs | | | |
| Scope/Modules | CACFP, SFSP, SNP, | CACFP, SFSP, NSLP | NSLP (SNP), FDP but |
| | FDP – SaaS | (like SNP) – Purchase, | not used – Purchase, |
| | | not SaaS | not SaaS |
| # of sponsors (users) | 300-500 | 600 | |
| Hardware Costs | \$ 0 | | |
| Software Service Costs | <mark>\$164,000</mark> | | |
| Software purchase cost | \$0 | \$381,000 (purchase) | \$197,000 NSLP |
| | | | \$225,000 FDP |
| Implementation Services | \$106,000 | \$145,000 (upgrade to | |
| | | SNP) | |
| System Integration Costs | \$0 | | |
| Professional Services (e.g. | \$0 | | |
| Project Management, | | | |
| Technical, Training, etc.) | | | |
| Hosting | \$43,200 | | |
| Data Conversion | \$47,350 | \$28,830 (to SNP) | |
| Total Acquisition Costs | <mark>\$360,550</mark> | \$381,000 (upgrade | \$422,000 |
| Year 1 | | and purchase) | |
| Ongoing Maintenance | <mark>\$240,000 (\$60K per</mark> | \$45,000 (\$15K per | \$69,000 (one module) |
| | <mark>module)</mark> | module) + \$19,500 for | |
| | AOE Followed-up | help desk | |
| | with CCG on why | | |
| | costs are higher | | |
| | than costs in other | | |
| | states. See Risk # | | |
| | 25. | | |

| CCG relationship/insight | | Good. Responsive, |
|--------------------------|--|------------------------|
| | | Issues with reporting, |
| | | no data dictionary for |
| | | tables |

Green – indicates costs are below average Yellow – indicates costs are at or above average

Copies of the CT and MO contracts are available out on the IR review SharePoint site.

3. Cost Assessment: Based on a review of the CCG proposal, the CCG project plan, the CCG pricing and evaluating other states that have implemented CCG solutions, it is the opinion of Mincar Consulting that the costs for implementation seem in line, but the maintenance costs are somewhat higher in a SaaS environment. We recommend continuing to reach out to other states, perhaps one that has exactly the same migration path and SaaS model as Vermont, and then to CCG to confirm that prices in the proposal are consistent with prices paid by other clients. Also consider research with the USDA for price comparisons.

Other references to use could include: Pennsylvania DoE – doing business with CCG for 7 years (as of 2009 contract) Idaho DoE – doing business with CCG for 9 years (as of 2009 contract) North Carolina Dept of Public Instruction – doing business with CCG 3 years (as of 2009 contract)

Additional Comments on Acquisition Costs:

• AOE should ask CCG for further cost breaks or discounts given the findings of past CCG contracts and proposals with other states.

6. Technology Architecture

The following diagram describes the technology environment for the proposed solution. All users would access the system on the hosted environment via the Internet. The diagram depicts sponsor (Supervisory Union) users, Colyar Consulting Group staff, and Vermont Agency of Education users in their respective environments. Also depicted is the US Department of Agriculture (USDA) environment where interface data from the FDP module is sent and received.



AOE should reach out to CCG to ensure that the servers are dedicated versus shared.

6.1 State IT Strategic Plan

The State of Vermont's procurement of a web-based, Child Nutrition Program for the Agency of Education follows many of the State's IT Strategic Plan Principles:

• Leverage IT successes in other states

Colyar Consulting Group (CCG) has become a U.S. leader in Child Nutrition Systems, serving over half the nation, i.e approximately thirty states over the past twenty years. They hold a very strong portfolio of clients from which they can leverage proven best practices. Mincar Consulting contacted two of these installations, CT and MO, and both of the referenced clients had positive things to say about CCG, that they were responsive and technically adept. The projects were completed on time and within budget.

Leverage shared service and cloud based computing

The proposed solution calls for a web-based, cloud computing Software as a Service (SaaS) solution. This model reduces or eliminates separate IT support costs for the State by reducing or eventually eliminating expensive and time-consuming hardware or software administration.

• Leverage modern IT delivery frameworks

Moving to a delivery environment where design, development, implementation and support of changes is outsourced will improve the State's ability to focus on business and keep pace with required changes. Examples of such required CNP change include bringing new mandated regulations on-line, or consolidating or reorganizing school districts.

Align the technology workforce to adapt to IT trends

The core competency of the Agency of Education is not technology. The outsourced solution from CCG will provide the opportunity for State of Vermont staff to better focus their skills and abilities on policy and program implementation rather than being burdened with technical service delivery activities.

In addition, this proposal will move the dB environment from Oracle to SQL Server dB. Oracle Database deployments are typically about 40% higher than comparable Microsoft SQL Server deployments and cost of maintenance is typically higher in Oracle than in SQL. For these reasons, moving to a SQL environment could be a cost savings in the long run.

• Couple IT with business process optimization

Over the past few years, the AOE has had to create a few manual work processes outside of the CNP programs. Moving to a fully supported, up-to-date environment will eliminate these work-arounds. Four examples of manual processes that will be automated with this upgrade include:

- The Summer food & meal pattern restrictions there was a time period restriction with the USDA , which then got lifted, but AOE has to manually work around this change right now.
- After Vermont consolidated school districts, reporting the total number of meals served and the accompanying accounting pieces has to be handled in a spreadsheet outside of CCG. This will lead to a reduction in the reporting processing time.
- 2015 Community Eligibility provision will have to be manually managed if this upgrade doesn't happen. Manual work includes application and processing claims outside of CCG. Approximately 25% of these school projects will fall into this 2015 Community eligibility provision.
- This new system would eliminate having an additional set of books for data matching, edit checks , accounting etc after vt school district consolidation.
- Include Business Process Analysis in the design sessions. Is there more opportunity for business process optimization and elimination of unneccary processes.

6.2 Service Level(s)

An SLA was not available from CCG, although an SLA will be provided to the AOE IT Director prior to contract signing.

CCG does not physically manage the hosting facilities. They are done by the third-party providers:

Newtek Technology; <u>http://www.thesba.com/</u>

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Server Intellect; <u>http://www.serverintellect.com/</u>

Looking at the The Newtek hosting website, their hosted environment boasts 99.999% availability of virtual infrastructure over a time period of 2 years. They site nightly backups and continuous monitoring as additional features.

AOE will need to clearly define their service level availability and disaster recovery needs and ensure that those needs and recourse for not meeting SLA levels are documented in the contract prior to signing.

Details of service levels and security provided can be found in Attachment 1.

6.3 Sustainability

Using a SaaS model, it will be much easier to fix bugs, add new features and easier to check that the changes have not introduced any bugs. This is a much more sustainable model for the State than having to provide in-house hardware and software maintenance and support.

AoE should ensure that in the SLA includes hosting-party responsibility for keeping software current and on fully supported releases. See Risk #22.

In the Cost Analysis ABC developed by AOE, a solution lifecycle of 20 years was used. Given technology and business changes, that length of time is unreasonable. Using a timeline of 10 years and then reassessing is more appropriate.

6.4 License Model

Unlimited Sponsors (Users) allowed: The CCG SaaS model can be used by multiple users at a time, and operates on a standard subscription fee per month basis. AOE estimates between 300-500 users across the various modules. Regardless, the fee is not based on the number of users, however, the AOE team indicated that there may be some users that no longer require access, so a data scrub of the active versus inactive users should be performed prior to launch.

Work from Anywhere: The CCG Child Nutrition Programs can be accessed from any computer or device at any time, and the only requirement is an internet connection. The current Oracle system is also webbased, but the user support team stated that a high percentage of calls they receive regard issues with accessing the system from various browsers. The new application is extremely mobile friendly and the learning curve is very low. In addition, online training on SaaS applications can be generated on demand.

The financial implications for the SaaS model results in less cost and less infrastructure investment.

6.5 Security

See Attachment 2

6.6 Disaster Recovery

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6.7 Data Retention

There are multiple requirements for data retention and the ability to access the child nutrition program historical data. For internal reporting purposes data should be retained for at least one year. The AOE Financial team believes that the USDA requires at least four years of data and that the federal government requires at least five years for financial records and auditing.

There are three risks and action items associated with data retention in this new proposed solution:

- 1. Determine the AOE data retention requirement
- 2. Ensure that the CCG proposal and contract accurately reflect this time requirement
- 3. Ensure that historical data is migrated from the Oracle platform to the SQL platform

If the data migration time period requirement does not match the contracted data migration plan, then the old Oracle system dB will need to be kept in operation. This changes the cost benefit model and ease of use significantly. See Risk #7.

| Risk ID # | Risk Process Group | Risk Knowledge Area | Risk Description | Impact | Negative Probability | Overall Rating | IR suggested Risk Strategy |
|-----------|--------------------------|------------------------|---|--------|-------------------------|-------------------|--|
| | Planning | Collect | The data migration requirements are unclear. The proposal indicates that two prior years of SNP data and only one prior year of CACFP data will be migrated; Financial and USDA requirements require 5 years of history for auditing and reporting. however if all years are not migrated, then the current system will need to be used to access older data, i.e. data from | | | | Determine the data history requirements and adjust business case , resources and costs accordingly |
| / | Planning | Requirements | anything prior to 2012. | н | н | н | costs accordingly |

6.8 Service Level Agreement (SLA) – redundant with service level Section 6.1

6.9 System Integration

There are currently two identified points of integration:

- CCG to VISION: Financial reimbursements to schools needs to be paid and tracked in the CCG system. This information must also be exported to the State Vision System.
- Food Distribution information to the USDA this is an interface that is provided within the FDP module. It is already written and can be utilized by AOE instead of the manual process today of reporting FDP information to the USDA.

7. Assessment of Implementation Plan

7.1 Implementation Readiness

• The reality of the implementation timetable

• The implementation plan presented in the proposal is realistic and attainable. The AOE technical and program teams have a high level of confidence in the vendor. CCG has a ten year history working with AOE, and continually deliver a high level of customer satisfaction.

• The implementation timeline presented in the CCG proposal with implementation of four functional modules and 3 operational modules is 13 months, 253 working days. CCG project implementation and business executives state that average implementation of a module is between 3-6 months, and the average length of time for the AOE implementation is 3 months per module. It is a migration, not a completely new implementation, therefore using the shortest historical duration for implementation seems appropriate.

- Training of users in preparation for the implementation
 - The appropriate level of training is included in the proposal
 A full day training session for VTDOE is included for each module and VTDOE training is included in this
 proposal pricing. Training for sponsor users is not available in the proposal but can be conducted on-site or via
 webinar.
 - The appropriate level of documentation for an implementation is included in the pricing:
 - System documentation (specifications)
 - User Manuals (for each module)
 - On-line help
- Readiness of impacted divisions/ departments to participate in this solution/project

The State has identified three resources that will be involved in the implementation of the project, and then three additional resources used to manage each of the modules. There will be no new positions added or taken away as a result of this implementation.

An internal AOE resource has been named as project coordinator. She has a good mix of both IT and business process experience and displays an eagerness to manage the project. State AOE management has identified this project as high priority and fully supported. They indicate that all staff will be made available as needed to make this project a success.

The actual cost of internal resources to manage the implementation should be re-examined depending on whether or not the FDP module is implemented. See risk #14.

| Risk ID # Group | oup Area | Risk Description | Impact | Negative Probability | Overall Rating | IR suggested Risk Strategy |
|-----------------|---------------|--|--------|-------------------------|-------------------|--|
| | Develop Human | Cost of internal resource needs for implementation should to be recalculated. The original cost was based on a 25 week schedule. The proposed schedule is 52 weeks so the cost should be doubled. Also consider | | | | Recalculate the internal resource needs based on a longer schedule. This will have an impact on the business case |

• Adequacy of design, conversion, and implementation plans

The Project management methodology from the CCG proposal states that they will engage in standard and appropriate Gap Analysis and Prototyping processes during design and implementation:

Gap Analysis / System Requirements

Business experts from the State, along with experts from the CCG staff, begin by performing an indepth review of the State's specific needs. Our business analysts use onsite JAD sessions to review and document the State's requirements and unique needs in areas specific to each function. We will compare business rules, edit checks, payment calculations, form layouts, report layouts, captured data elements and any other pertinent functionality issues. At this time we will also determine how the various programs will interact and how the information will be stored in order to provide appropriate access to each user, based on security levels.

Once the Analysis tasks have been completed and reviewed, we will produce design specifications that communicate to DOE and the CCG developers how the system should operate (i.e., field names, business rules, dropdown list values, etc.). This will also be used to develop a prototype of the future system.

Prototypes

One of the barriers to effective user participation in the requirements and design process has always been making requirements and design concepts more tangible to the user. All too often users and information systems professionals who seem to agree on the requirements and design concepts disagree when the system is actually delivered. In order to avoid this situation, CCG creates prototypes of forms and screens, where applicable, to provide the user with a more concrete idea of what to expect with the final product.

When the prototype is at a point whereby it can become interactive with a user, it will be placed on a test website so that DOE can commence online review of how the new system is looking and operating. This allows for a smoother transition to User Acceptance Testing and final implementation because it provides a method for DOE to become familiar with the system.

• Adequacy of support for conversion/implementation activities

The CCG proposal did not highlight specific data conversion details, however, the data will be migrated from an Oracle platform to a SQL Server platform. The bulk of that conversion effort will be handled by CCG staff, but testing for data integrity will be a part of the implementation plan. The AOE team recognizes and understands this work effort.

• Adequacy of agency and partner staff resources to provide management of the project and related contracts (i.e. vender management capabilities)

CCG was interviewed along with State AOE staff. All have demonstrated a solid understanding and respect for project management discipline and plan to employ PMI and DII based standards.

The following figure represents Colyar Consulting Group's project management approach. It represents a traditional model of project management and will be used for each module implemented.

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Project Management Approach

• Adequacy of testing plan/approach

There is an adequate level of experience in both AOE and CCG to create solid test plans. Although there were not any documented test plans or test scripts available yet for this project, the AOE team currently engages in testing processes prior to rolling out any new features. This same testing process will be enhanced, documented and used during the migration project implementation. Various business process experts will be brought in to the implementation team to ensure that the current functionality and requirements are met.

• General acceptance/readiness of staff

Mincar Consulting believes the State AOE staff is capable and ready to accept the challenges that will be presented by the project. There is no indication of concern or reluctance demonstrated. As a matter of fact, many staff indicated excitement and relief for the project to get started. Key resources have been defined, and additional resources have been identified but not specifically notified or documented.

To improve staff readiness, Mincar consulting recommends a demo of the SaaS CCG system. No one at AOE has seen the proposed system, and this represents a risk in terms of functionality and usability to be delivered.

| Risk ID # | Risk Process Group | Risk Knowledge Area | Risk Description | Impact | Negative Probability | Overall Rating | IR Suggested Risk Strategy |
|-----------|--------------------------|---------------------------|--|--------|-------------------------|-------------------|-------------------------------|
| | | | | | | | |
| 6 | Planning | Collect Requirements | AOE has not seen a demo of the SaaS CCG system. | н | м | н | Request a demo from CCG |

Additional Comments on Implementation Plan:

No Additional comments on Implementation Plan

7.2 Risk Assessment & Risk Register

The Risk Assessment combines input from the documents received from the State, from team interviews of VT AOE business and technical employees, and from a DII program management oversight employee.

An initial list of risks and risk response strategies was developed by Mincar Consulting, then reviewed with an AOE project stakeholder and DII program management. AOE subsequently identified additional strategies and action items for risk management mitigation.

The results of that process can be seen in the full risk register in Attachment 2.

Additional Comments on Risks:

No additional comments on risks.

8. Cost Benefit Analysis

| Business Case | | | | | | | | | | | | | | |
|--|---|--------------------|----|----------|------|-----------------|--------|------------|--------|------------|--------|--------------|--------|--------------------|
| | | | | | | | | | | | | | | |
| 10 Year Return on Inve | stmen | t Analysis | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| Source: Cost & Revenue | Source: Cost & Revenue Impact Analyses, Mincar Consulting | | | | | | | | | | | | | |
| Assumptions: See CNP ROI benefits tab for reduced cost details | | | | | | | | | | | | | | |
| Grey cells indicate user | input | 5 | | | | | | | | | | | | |
| | | | | 440/ | | | | | | | | | | |
| | Pavi | nal Kate of Keturn | | 3.86 | No | ote: 46 33 Mor | nths | | | | | | | |
| | rayı | | | 5.80 | NC | ne. 40.35 Wol | 1113 | | | | | | | |
| <u>Benefits</u> | | | | | | | | | | | | | | |
| Sensitivity Factor | | 100% | | | | | | | | | | | | |
| - | | | | | | | | | | | | | | |
| - | | Year 1 | | Year 2 | | Year 3 | | Year 4 | | Year 5 | | Year 6-10 | | |
| Benefit Growth | | | | 5% | | 5% | | 5% | | 5% | | 5% | | |
| | | | | | | | | | | | | | | |
| Benefit Area | | 1 | | Benefit | s by | Year (ŞActual |) | 4 | | F | | 6 10 | | Total |
| Incremental Revenue | Ś | - | Ś | <u>-</u> | Ś | - | Ś | | Ś | - | Ś | | Ś | _ |
| Reduced Costs | \$ | - | \$ | 759,185 | \$ | 797,144.25 | \$ | 837,001.46 | \$ | 878,851.54 | \$ | 4,613,970.56 | \$ | 7,886,153 |
| Total Benefit | \$ | - | \$ | 759,185 | \$ | 797,144 | \$ | 837,001 | \$ | 878,852 | \$ | 4,613,971 | \$ | 7,886,153 |
| | | | | | | | | | | | | | | |
| <u>Costs</u> | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| Cost Area | | | | Costs | by Y | 'ear (\$Actual) | | | | | | | | Total |
| Coffware convice for | ć | 1 | | 2 | ć | 3 | ć | 4 | ć | 5 | ć | 6-10 | ć | 164.000 |
| Hosting | Ş ¢ | 164,000 | | | Ş | - | Ş ¢ | - | Ş ¢ | - | ې د | - | ې د | 164,000 |
| | ç | 43,200 | | | ç | | Ş | - | Ş | | ç | | ş | 4 3,200 |
| Software Consulting / Implementation | \$ | 106,000 | | | \$ | - | \$ | - | \$ | - | \$ | - | \$ | 106,000 |
| Maintenance Fee | | | \$ | 207,200 | \$ | 207,200 | \$ | 207,200 | \$ | 207,200 | \$ | 1,087,800 | \$ | 1,916,600 |
| Training | | | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - |
| Data Conversion | \$ | 47,350 | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | 47,350 |
| Total Cost | \$ | 360,550 | \$ | 207,200 | \$ | 207,200 | \$ | 207,200 | \$ | 207,200 | \$ | 1,087,800 | \$ | 2,277,150 |

Additional internal staff resource requirements used in the Cost Benefit Analysis:

Implementation Resource costs:

| Implementation Internal Resources | | | | | | | |
|---|-----------------------------|--------------------------|--------------|----------------------|-------------|--------------|-------------|
| Staffperson | Loaded salary & benefits | Loaded Hourly Rate | FTE (Effort) | Duration in hours | Total | General Fund | Federal |
| Various | 75,119 | \$ 36.11 | 0.5 | 500 | \$54,172.36 | \$ 16,684.75 | \$37,487.61 |
| | | | | | | 30.80% | 69.20% |

Operational Resource

costs:

| 000101 | | | | | | | |
|------------------|-----------------------------|--------------------------|--------------|----------------------|------------|-------------|------------|
| Ongoing Internal | | | | | | | |
| Resources | | | | | | | |
| Staffperson | Loaded salary & benefits | Loaded Hourly Rate | FTE (Effort) | Duration in hours | Total | GF | Fed |
| Various | 75,119 | \$ 36.11 | 0.4 | 64 | \$2,253.00 | \$ 1,810.00 | \$4,947.61 |
| | | | | | | 26.79% | 73.21% |

Current Resource costs:

| Current Internal | | | | | | | |
|------------------|-----------------------------|--------------------------|--------------|-------------------|-------------|-------------|-------------|
| Resources | | | | | | | |
| Staffperson | Loaded salary & benefits | Loaded Hourly Rate | FTE (Effort) | Duration in hours | Total | GF | Fed |
| Stanperson | | nate | | III IIO UI S | Total | 0. | 1.54 |
| Various | 547,941 | \$ 37.63 | 0.29 | 820 | \$29,457.00 | \$ 9,446.03 | \$20,011.81 |
| | | | | | | | |
| | | | | | | 32.07% | 67.93% |

1. Analysis Description

The cost benefit analysis was conducted using information provided by AOE IT staff, the CCG proposal, and CCG pricing. This information was combined with some estimates on cost benefits to create an overall costing for the project.

2. Assumptions

- <u>IRR</u> Internal rate of return (IRR) is used to evaluate the attractiveness of a project or investment. The higher the IRR, the better the investment.
 - i. In this case the project IRR was 11%, and assuming the cost of capital for other opportunities is lower than that amount, this is a solid investment.
- <u>Payback period</u> The Payback period is the length of time required for an investment to recover its initial outlay in terms of profits or savings.
 - i. This project has a payback period of 3.86 years, 46 months. This is an acceptable payback period for an IT project with a long-term lifecycle. Many organizations have their own benchmarks for an acceptable payback period, but in general a payback period of less than three years for a 5 year expectancy or 4 years for a 10 year expectancy is ideal.
- <u>Years 6-10 -</u> Costs for the proposed vendor solution will remain constant for 5 years and then increase by 5% in years 6-10.
- <u>Internal resource Costs</u> Loaded salary benefits for State personnel and FTE hours were totaled ; the loaded hourly rate and the FTE were averaged. Details can be found in the ABC Cost Analysis Form. Labor costs were used in the CBA but not in the implementation or operational cost analysis.
- <u>Additional costs This cost analysis does not include the 3% DII oversight charge or the \$25K cost of completing an Internal Review.</u> This means that numbers in this analysis may be different than numbers found in the ABC form.

3. Funding

Funding sources for resources, hardware and software are indicated above. The project will be paid for from a federal Project funding, specifically from US Department of Agriculture Re-authorization funds. According to the summary ABC form, the funding sources are 92% (federal)/8% (state general fund) for implementation and 99%/1% for ongoing costs, however this does not match the details found in the support materials for current cost funding. For purposes of this analysis, we used a 99% (fed)/1% (GF) fund sourcing.

4. Tangible/ Intangible Benefits

The following savings were used as input to the calculation for the cost benefit analysis. The reduced maintenance costs and reduction in hardware and software costs were supplied by AOE IT. The reduction in customer service calls a benefit mentioned by implementation team members and calculated by Mincar Consulting.

| ROI Savings Detail - AOE Child Nutrition Program | Cost Savings |
|--|--------------|
| | |
| Reduced cost of internal resources for maintenance | \$22,700.00 |
| | |
| | |
| Eliminate current hardware and software costs | \$746,485.00 |
| | |
| Reduce number of customer service calls | \$20,000.00 |
| Total ROI Savings | \$789,185.00 |

5. Costs vs. Benefits

Based on the IRR and payback period, it is our conclusion that the benefits outweigh the costs in this project.

6. **IT ABC Form Review:** The IT ABC form (Business Case/Cost Analysis) created by the Business for this project can be found out on the project SharePoint drive and was used as a basis for the cost benefit analysis.

Additional Comments on the Cost Benefit Analysis:

No additional comments on the Cost Benefit Analysis.

9. Impact Analysis on Net Operating Costs

| Cost detail | Existing Orac | le Solution | New SQL Solution - Purchase | New SQL Solution - SaaS |
|---|---------------|-------------|--------------------------------|----------------------------|
| | | | | |
| SNP | | | \$165,000.00 | |
| CACFP | | | \$165,000.00 | |
| All modules (SNP, CACFP, SFSP, FDP) | \$0.00 | | | \$164,000.00 |
| Accounting Maintanance Convity | | | (included) | (included in |
| Accounting, Maintenance, Security | | | (included) | \$164,000) |
| Data Conversion | \$0.00 | | \$47,350.00 | \$47,350.00 |
| Hosting | \$0.00 | | \$43,200.00 | \$43,200.00 |
| Maintenance | \$78,000 | | (included) | (included) |
| One - time setup | | | \$0.00 | \$106,000.00 |
| Software licenses (Oracle) | \$29,291 | | | |
| Hardware | \$22,194.50 | | \$0.00 | \$0.00 |
| Year 1 Total | | | \$420,550.00 | |
| Year 1 Proposal offer price | | \$129,485 | \$376,766.00 | \$360,550.00 |
| | | | | |
| SFSP | | | \$140,000.00 | |
| FDP | | | \$225,000.00 | |
| All modules (SNP, CACFP, SFSP, FDP) | | | | \$164,000.00 |
| Data Conversion | | | \$9,960.00 | \$0.00 |
| Hosting | | | \$43,200.00 | \$43,200.00 |
| Maintenance (2 additional modules - \$60K/module) | \$78,000 | | \$120,000.00 | (included) |
| Software licenses (Oracle) | \$29,291 | | | |
| Hardware | \$22,194.50 | | \$0.00 | \$0.00 |
| Year 2 Total | | \$129,485 | \$538,160.00 | \$207,200.00 |
| | | | | |
| All modules (SNP, CACFP, SFSP, FDP, Accounting , | | | | |
| Maintenance, Security) | | | | \$164,000.00 |
| Hosting | | | \$43,200.00 | \$43,200.00 |
| All Inclusive Maintenance (\$60/K per module x 4 modules) | \$78,000 | | \$240,000.00 | |
| Software licenses (Oracle) | \$29,291 | | | |
| Hardware | \$22,194.50 | | \$0.00 | \$0.00 |
| Year 3 Total | | \$129,485 | \$283,200.00 | \$207,200.00 |
| | | | | |
| All modules (SNP, CACFP, SFSP, FDP, Accounting , | | | | |
| Maintenance, Security) | | | | \$164,000.00 |
| Hosting | | | \$43,200.00 | \$43,200.00 |
| All Inclusive Maintenance (\$60/K per module x 4 modules) | \$78,000 | | \$240,000.00 | |
| Software licenses (Oracle) | \$29,291 | | | |
| Hardware | \$22,194.50 | | \$0.00 | \$0.00 |
| Year 4 Total | | 129,485 | \$283,200.00 | \$207,200.00 |
| | | | | |
| All modules (SNP, CACFP, SFSP, FDP, Accounting , | | | | |
| Maintenance, Security) | | | | \$164,000.00 |
| Hosting | | | \$43,200.00 | \$43,200.00 |
| All Inclusive Maintenance (\$60/K per module x 4 modules) | \$78,000 | | \$240,000.00 | |
| Software licenses (Oracle) | \$29,291 | | | |
| Hardware | \$22,194.50 | | \$0.00 | \$0.00 |
| Year 5 Total | | \$129,485 | \$283,200.00 | \$207,200.00 |
| Year 6-10 (include 5% increase) | | \$679798 | \$1,486,800.00 | \$1,087,800.00 |
| | \$1,327,226 | | \$3,251,326.00 | \$2,277,150.00 |

| Operating Costs Only | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6-10 | Total |
|----------------------|--------------|--------------|--------------|--------------|--------------|----------------|----------------|
| Existing | \$129,485.50 | \$129,485.50 | \$129,485.50 | \$129,485.50 | \$129,485.50 | \$679,798.88 | \$1,327,226.38 |
| Proposed (SaaS) | \$207,200.00 | \$207,200.00 | \$207,200.00 | \$207,200.00 | \$207,200.00 | \$1,087,800.00 | \$2,123,800.00 |

| Savings | -\$77,714.50 | -\$77,714.50 | -\$77,714.50 | -\$77,714.50 | -\$77,714.50 | -\$408,001.13 | -\$796,573.63 |
|---|--|--|--|--|--|--|---|
| Cumulative Savings | -\$77,714.50 | -\$155,429.00 | -\$233,143.50 | -\$310,858.00 | -\$388,572.50 | -\$796,573.63 | -\$1,962,291.13 |
| State Contribution approximate % | 1% | 1% | 1% | 1% | 1% | 1% | 1% |
| State Actual Op Savings based on approximate contribution % | -\$777.15 | -\$1,554.29 | -\$2,331.44 | -\$3,108.58 | -\$3,885.73 | -\$7,965.74 | -\$19,622.91 |
| | | | | | | | |
| | | | | | | 1 | |
| Overall Project Impact | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6-10 | Total |
| Overall Project Impact Existing Cost | Year 1 \$129,485.50 | Year 2 \$129,485.50 | Year 3 \$129,485.50 | Year 4 \$129,485.50 | Year 5 \$129,485.50 | Year 6-10 \$679,798.88 | Total \$1,327,226.38 |
| Overall Project Impact Existing Cost Proposed Cost | Year 1 \$129,485.50 \$207,200.00 | Year 2 \$129,485.50 \$207,200.00 | Year 3 \$129,485.50 \$207,200.00 | Year 4 \$129,485.50 \$207,200.00 | Year 5 \$129,485.50 \$207,200.00 | Year 6-10 \$679,798.88 \$1,087,800.00 | Total \$1,327,226.38 \$2,123,800.00 |
| Overall Project Impact Existing Cost Proposed Cost Savings | Year 1 \$129,485.50 \$207,200.00 -\$77,714.50 | Year 2 \$129,485.50 \$207,200.00 -\$77,714.50 | Year 3 \$129,485.50 \$207,200.00 -\$77,714.50 | Year 4 \$129,485.50 \$207,200.00 -\$77,714.50 | Year 5 \$129,485.50 \$207,200.00 -\$77,714.50 | Year 6-10 \$679,798.88 \$1,087,800.00 -\$408,001.13 | Total \$1,327,226.38 \$2,123,800.00 -\$796,573.63 |
| Overall Project Impact Existing Cost Proposed Cost Savings Startup Costs | Year 1 \$129,485.50 \$207,200.00 -\$77,714.50 \$153,350.00 | Year 2 \$129,485.50 \$207,200.00 -\$77,714.50 | Year 3 \$129,485.50 \$207,200.00 -\$77,714.50 | Year 4 \$129,485.50 \$207,200.00 -\$77,714.50 | Year 5 \$129,485.50 \$207,200.00 -\$77,714.50 | Year 6-10 \$679,798.88 \$1,087,800.00 -\$408,001.13 | Total \$1,327,226.38 \$2,123,800.00 -\$796,573.63 \$153,350.00 |
| Overall Project Impact Existing Cost Proposed Cost Savings Startup Costs Proposed Total Cost | Year 1 \$129,485.50 \$207,200.00 -\$77,714.50 \$153,350.00 \$360,550.00 | Year 2 \$129,485.50 \$207,200.00 -\$77,714.50 \$207,200.00 | Year 3 \$129,485.50 \$207,200.00 -\$77,714.50 \$207,200.00 | Year 4 \$129,485.50 \$207,200.00 -\$77,714.50 \$207,200.00 | Year 5 \$129,485.50 \$207,200.00 -\$77,714.50 \$207,200.00 | Year 6-10 \$679,798.88 \$1,087,800.00 -\$408,001.13 \$1,087,800.00 | Total \$1,327,226.38 \$2,123,800.00 -\$796,573.63 \$153,350.00 \$2,277,150.00 |

1. Summary of the Operational Analysis

Implementing the proposed solution will increase total operational costs for the next ten years to \$2.12M. This represents a 60% increase in operational costs. Although operation costs will increase, internal staff hours to support the system will decrease.

2. Net operating costs that will be covered by federal funding

It is estimated that approximately 99% of the operational costs of the project will be covered by Federal funding. This means \$267K of the \$270K operational costs will be covered by federal funds every year.

3. The Break-even Point

With a payback period of 46 months and a project start date of July 2014, the break even point will be May, 2018.

Т

Attachment 1 – Hosting Solution

The proposed hosting environment includes:

- All software licenses, including Microsoft SQL Server 2012. AOE should ensure that upgrades to infrastructure software is timely and non-invasive.
- Access to the application through a T1 bandwidth connection. Connectivity and response time with AOE and sponsors should be included in the test plan.
- Secure Socket Layer (SSL) technology and firewall protection on the test and production web servers to provide security for communications over the network.
- Intrusion penetration and detection (IPS/IDS) network probes to identify and eradicate network problems and resolve vulnerabilities, including real-time detection of attempted intrusion.

• Nightly backups of the system. AOE should clearly define backup and restore requirements. DII will send AOE additional documentation about security (physical and application) to address any system or data integrity concerns.

- 24 x 7 x 365 system availability (excluding scheduled maintenance windows). AOE should understand and agree to maintenance windows.
- Industry Standard Server Configuration to maximize hardware reliability.
- Patch management as issued by software and hardware vendors.
- Server hardware and software support and monitoring of the environments.
- Management of all software deployments to the test and production environment.

All items highlighted in red need to be clearly defined in the final SLA that AOE signs with CCG.

CCG uses a third party vendor like Newtek for system hosting. The Newtek website says:

Network Availability

Network availability and uptime is a key attribute for any quality web hosting provider, and we've made it one of our top priorities. It is our policy to have two full tier 1 carriers utilized at levels far below their peak thresholds, which feeds into our fully redundant network infrastructures, allowing for a complete and immediate switchover if one of the carriers became unavailable for any reason.

We also employ redundant power supplies to our network and datacenter operations to ensure your website and related services are available even during a power outage. We use top-of-the-line uninterruptible power supply systems for protection against power spikes and outages, and our multiple 2 Mw Caterpillar diesel generators allow us to function at full capacity for an indefinite period of time.

Server Monitoring

Servers on our shared hosting segment are monitored 24 hours a day, every day of the year, in 5

second intervals. We also use a blend of third party products, in-house developed solutions, and 24X7X365 staff to monitor a multitude of performance related services, including CPU and memory usage, and other items to ensure the stability and reliability of our network and to customer websites.

In addition to monitoring, Newtek Web Hosting has implemented a detailed escalation policy for issues that go beyond that of general server or network issues. In general, we employ secondary and tertiary levels of escalation on all issues, regardless of scope. Support representatives, server operations, and network operations staff are available 24X7X365 to ensure that all issues are dealt with and resolved as quickly as possible.

For dedicated and virtual private servers (VPS), Newtek Web Hosting offers a "managed services" option that handles some of the server monitoring responsibilities and patch management to the server. These "managed services" include the management of updates on all preinstalled software by Newtek Web Hosting administrators, performed on a similar schedule to that of our shared segment, ensuring that they receive updates and fixes in a timely manner. In terms of monitoring, customers can set test pages for a variety of request types, like standard HTTP requests, requests to monitor services (e.g. ColdFusion and/or ASP), SMTP, POP, and others. These requests can be made at a time interval set by the customer, and then rules are created for how our staff is to react if one of those monitors happens to fail. While several of the solutions to server problems can be handled with simple reboots of servers or services, other courses of action may be required to alleviate issues. The managed services option includes, at no additional costs, reboots of services and restarting of services. However, any additional work on the part of the Newtek Web Hosting staff may incur an additional hourly charge. Regardless, customers utilizing managed services can track any and all services performed on their servers using our WebControlCenter.

Data Protection & Security

One of the best methods to protect your critical data is to be sure you always have reliable backups. All services on our shared hosting segment receive daily backups, including website, database, and email data. Dedicated or VPS customers have the option to add a daily backups option as well. We retain all backups for a two week period, which includes two full weekly backups and then daily incremental backups of all new data added in between.

Virus protection for a network infrastructure is also essential. Therefore, Newtek Web Hosting scans for viruses on all files coming into the shared hosting segment, and runs continuous scans of all servers, regardless of server function. This virus scanning occurs in real time and includes the scanning, quarantining, fixing and/or deleting of emails that come into our network. In cases where emails are deleted or quarantined due to infection by a virus, an email is returned to the sender informing them of the infection.

While securing servers is one step to protecting the integrity of our network, stopping "bad" traffic from reaching the servers in the first place is even more important. Newtek Web Hosting utilizes firewalls and other security features throughout its network. We restrict common ports of attack at our firewall, and these are manual/static changes. Because tens of thousands of packets pass through our network every second, it is not possible to know what type of attack or data is coming in or

leaving out network; this is why Newtek Web Hosting implements two types of preventative measures: 1) The first system monitors signatures on common packet types. When a certain signature is detected, an alert is raised. Depending on the threshold limitations set for these alerts, dynamic blocking is done at the firewall to stop the data from continuing to enter our network, and 2) since monitoring types of packets is not enough, monitoring the number of packets from certain locations is incredibly important. While valid packets that are not caught by their packet type will pass through as valid data, an extreme amount of them from one or many locations is considered a Denial of Service attack. We have systems that monitor normal trend of data flow and when unusual amounts of traffic are found, our systems dynamically block the data from the network on the fly.

Newtek Web Hosting also utilizes a third party to run security and vulnerability audits. These audits include, but are not limited to, port scans, server configuration audits, and other security and vulnerability checks that help ensure that the network and servers we manage are as secure as possible. These audits keep Newtek Web Hosting safe, secure, and PCI compliant. Newtek Web Hosting is also registered as a Safe Harbor with the U.S. Department of Commerce. What this means is that Newtek Web Hosting has met or exceeded certain guidelines for the adequate protection of private and confidential information as defined by the European Union's Directive on Data Protection. More information on Safe Harbor can be found at <u>www.export.gov/safeharbor</u>.

Internal procedures and controls

Newtek Web Hosting takes great care to secure customer data, and that includes internally. Newtek Web Hosting employees only have access to the customer information that enables them to perform his or her job duties to their fullest extent. Using our custom WebControlCenter, we are able to limit access to customer data for all employees. For example, our Customer Service Department has access to billing information pertaining to clients, but they do not have access to the functionality that allows them to change customer site settings, or terminal into customer servers. Our Technical Support staff, on the other hand, has the ability to terminal into servers, but may not necessarily have access to customer billing information. Access to customer data is strictly determined by job role and position within the Newtek Web Hosting employee structure.

We've also implemented a change management policy and procedure to effectively manage and control all internal changes that may affect customers. This includes, for example, any internal request for access to our core systems, and any changes to our website or WebControlCenter. This ensures that all changes that come internally have been properly tested and approved by a Newtek Web Hosting executive before they are deployed.

In terms of hiring practices, Newtek Web Hosting has, and follows, strict guidelines when it comes to hiring. These guidelines are addressed in the Employee Handbook and Non Disclosure Agreement that each employee receives, reads, and is required to sign off on as proof of reading and understanding all of Newtek Web Hosting's policies and procedures. Each prospective Newtek Web Hosting employee is phone screened by the Human Resources staff and then scheduled for inperson or phone interviews with the appropriate hiring manager. Hiring managers may elect to extend the hiring process based on the candidate pool and needs of the company and department. Any candidate who makes it through the interview process receives an extensive background check prior to any offer of employment. The President and Senior Vice President of Human Resources or

CEO of the company must approve any request for new hires prior to an offer of employment.

Finally, Newtek Web Hosting has a strict policy for the release and dissemination of customer data that is addressed in both our Terms of Service Agreement and our Corporate Privacy Policy. Newtek Web Hosting does not release, for any reason, any information relating to customers without prior written permission from the customer or without proper authentication and verification of ownership of that data. This policy covers everything from billing and support issues as well as questions from prospective Newtek Web Hosting customers looking for information or references about existing customers (for example, a prospective customer may ask us to provide them with names of our existing clients so they can speak with them. We would not provide any information in this case, and refer the inquiry to our public forum where existing customers may willingly provide their own information.)

Physical Security

Our investment in enterprise-level hardware, data security measures, and network redundancy would be meaningless if we did not have the proper physical security measures in place to protect our assets. Therefore, we have implemented several security measures to ensure the physical security of our infrastructure and customer data. At our corporate office, we employ keycard access to enter the building and to key areas within the building. This ensures that only Newtek Web Hosting employees, or those persons with proper authorization, are able to enter our corporate office.

The Newtek Web Hosting datacenter can only be accessed by authorized Newtek Web Hosting staff with proper keycard, touch pad, and retinal scanning clearance, and well as passage through a bulletproof, weight sensitive man-trap booth, so that only those employees requiring access to our servers are granted access. We also utilize manned, third-party security staff at all times, 24X7X365, and a state-of-the-art video surveillance system.

Our datacenter is also located in Scottsdale, Arizona, a geographical area that features a highly stable climate and is nearly free from all natural disaster threats, such as earthquakes, tornados, hurricanes, and landslides. Scottsdale also ranks low among large cities as a target of terrorist or malicious activity.

Conclusion

As illustrated, Newtek Web Hosting has implemented many ways to protect customer data, not only at the server level, but at the highest points of our network. All of our precautions, of course, do not ensure 100% protection, and our procedures are ever evolving. It is our goal to continually update our security procedures so that we can provide the most secure web hosting environment possible to our customers.

Attachment 2 - Risk Register

| | Project Management Process Groups | | | | | | | |
|---|------------------------------------|---|--|---|-------------------------|--|--|--|
| Knowledge Areas | <u>Initiating</u> Process Group | <u>Planning</u> <u>Process Group</u> | Executing Process Group | Monitoring & Controlling Process Group | Closing Process Group | | | |
| Project Integration Management | Develop Project Charter. | Develop Project Management Plan. | Direct and Manage Project Execution. | Monitor and Control Project Work. Integrated Change Control. | Close Project or Phase. | | | |
| Project Scope Management | | Collect Requirements. #2. Define Scope. #3. Create WBS. | | Verify Scope. Control Scope. | | | | |
| Project Time Management | | #1. Define Activities.#2. Sequence Activities.#3. Estimate Activity Resources.#4. Estimate Activity Durations.#5. Develop Schedule. | | Control Schedule. | | | | |
| Project Cost Management | | #1. Estimate Costs.#2. Determine Costs. | | Control Costs. | | | | |
| Project Quality Management | | #1. Plan Quality. | #1. Perform Quality Assurance. | Perform Quality Control. | | | | |
| Project Human Resource Management | | #1. Develop Human Resource Plan. | #1. Acquire Project Team.#2. Develop Project Team.#3. Manage Project Team. | | | | | |
| Project Communications Management | ldentify Stakeholders | #1. Plan Communications. | #1. DistributeInformation.#2. ManageStakeholderExpectations. | #1. Report Performance. | | | | |
| Project Risk Management | | #1. Plan Risk Management. #2. Identify Risks. #3. Perform Qualitative Risk Analysis. #4. Perform Quantitative Risk Analysis. #5. Plan Risk Responses. | | #1. Risk Monitoring and Controlling. | | | | |

| Project Procurement | #1. Plan Procurements. | #1. Conduct Procurements. | #1. Administer Procurements. | #1. Close Procurements. |
|---------------------|------------------------|------------------------------|---------------------------------|-------------------------|
| Management | | | | |

The following risks were identified and categorized according to the PMI Process Groups and Knowledge Areas identified above. Because the project is still in proposal stage, the risks only occur in the initiation and planning groups. Another risk identification process should be held once implementation begins and the risks below should be re-examined periodically.

| | | | | | Negati | | | | | |
|---------|------------|-----------------|-------------------------------------|--------|--------|---------|---------------------------|-----------------|-----------------------------------|------------|
| | Risk | | | | ve | | | | | Reviewers |
| Risk ID | Process | Risk Knowledge | | | Probab | Overall | IR Suggested Risk | Risk Response | | Additional |
| # | Group | Area | Risk Description | Impact | ility | Rating | Strategy | Timing | AOE Response | Comments |
| | | | No Charter has been created for | | , | 5 | | 0 | • | |
| | | | this Project. A proposal created by | | | | | | | |
| | | | the vendor CCG and creating a | | | | Create a Charter | During | We will develop a charter as | |
| | | | charter is the first phase in the | | | | immediately after signing | Initiation/Star | one of the first deliverables | |
| 1 | Initiation | Develop Charter | vendor proposal. | н | L | L | the proposal contract. | tup | once the contract is in place. | Agree |
| | | | | | | | | | Deputy Secretary & CFO, Bill | |
| | | | | | | | | | Talbott, is familiar with the | |
| | | | | | | | | | history of the system and | |
| | | | No executive sponsor identified | | | | | | scope of this project. He will | |
| | | | yet for the project. Although this | | | | | | serve as executive sponsor. | |
| | | | is an infrastructure type of change | | | | | | Directors Deb Quackenbush | |
| | | | , business and finance is impacted. | | | | | | and Brian Townsend are both | |
| | | | | | | | | | very engaged in this project to | |
| | | Identify | | | | | Name a business leader | Prior to | ensure it is completed | |
| 2 | Initiation | Stakeholders | | н | L | L | as the project sponsor. | Contract | successfully. | Agree |
| | | | | | | | | | Requirements have evolved | |
| | | | | | | | | | over the 10 years that the | |
| | | | | | | | | | system has been in place and | |
| | | | | | | | | | enhanced. All current | |
| | | | | | | | | | functionality will be included in | |
| | | | AOE Child Nutrition Program | | | | | | the new system. Detailed | |
| | | | requirements were not provided. | | | | | During | requirements will be | |
| | | | A Requirements analysis is stage in | | | | Identify detailed | Planning/Req | documented during | |
| | | Collect | the CCG System Development | | | | requirements with the | uirements | planning/requirements phases | |
| 3 | Planning | Requirements | Methodology | Н | L | L | Vendor. | Analysis | once a contract is in place. | Agree |
| | | | USDA changes will be agreed upon | | | | | | | |
| | | | based on a nationwide consensus; | | | | Obtain documentation | | Action Item: AOE will reach out | |
| | | | VT is relatively small user base to | | | | from CCG that explains | During | to Colyar to gather | |
| | | | CCG and therefore changes or | | | | how the USDA changes | Planning/Req | documentation of these | |
| | | Collect | requests may not carry as much | | | | get determined and | uirements | processes and include them in | |
| 4 | Planning | Requirements | clout. | М | L | L | developed. | Analysis | the contract. | Agree |
| | | | During implementation will the | | | | | | | |
| | | | team be running parallel systems | | | | | | | |
| | | | for a period of time or is it a big | | | | | | The timeline and migration | |
| | | | bang conversion to the new | | | | | | plan will be detailed in the | |
| | | | system? Additional data | | | | Obtain recommendation | | contract. AOE agrees that this | |
| | | | processing time for parallel system | | | | from CCG. Revise | During | is a risk that needs to be | |
| | | Collect | implementation was not | | | | resource needs | Initiation/Star | mitigated prior to contract | |
| 5 | Planning | Requirements | accounted for. | М | М | M | accordingly | tup | execution. | Agree |

| 6 | Planning | Collect Requirements | AOE has not seen a demo of the SaaS CCG system. | н | м | н | Request a demo from CCG | Prior to Contract | Action Item: AOE has already discussed this with CCG and will arrange for a demo prior to contract execution. | Agree |
|----|----------|-------------------------|---|---|---|---|--|----------------------------------|---|--|
| 7 | Planning | Collect Requirements | The data migration requirements are unclear. The proposal indicates that two prior years of SNP data and only one prior year of CACFP data will be migrated; Financial and USDA requirements require 5 years of history for auditing and reporting. however if all years are not migrated, then the current system will need to be used to access older data, i.e. data from anything prior to 2012. | Н | н | н | Determine the data history requirements and adjust business case , resources and costs accordingly | Prior to Contract | Action Item: AOE will work with CCG to ensure that required historical data is migrated. This will be included in contract deliverables prior to contract execution. | Agree |
| 8 | Planning | Develop Schedule | The V3 CCG Proposal has a project start date of 6/2. This date and schedule should be reworked once the proposal is approved and contracts are put into place. | Μ | L | L | Rework the schedule with an appropriate start date. Note that significant shift in dates could change the order of implementation | During Planning | The CCG proposal dates were place holder dates to demonstrate overall project timeline. Dates included in the actual contract will be updated to reflect the final adjusted timeline. | Agree; module order can be switched around in order to accommodate business busy times |
| 9 | Planning | Develop Schedule | A data scrub of inactive users will need to be done during implementation. | L | L | L | Build this activity into the project schedule | During Planning | Action Item: AOE child nutrition program staff will work with CCG to identify inactive users and ensure that they are not migrated to the new system. This will take place during the planning phase once the contract is in place. | Agree |
| 10 | Planning | Determine Budget | A large percentage of this project is funded with federal funds. The current funds run out in 9/2014 and new funding sources will need to be secured. | M | L | L | Identify specific grants and funding sources. | During Initiation/Star tup | AOE child nutrition staff are working with AOE business office to detail specific funding sources for this project. This is an internal control procedure that is required to be in place prior to contract execution. | Agree |

| 11 | Planning | Determine Budget | Cost of training end users is not included in the proposal costs. It will therefore need to be covered by AOE internal staff. This was not included in the implemenation or ongoing costs calculation. | L | L | L | Rework the internal resource cost spreadsheet to include additional time for training. Include end user training in the project schedule. | During Planning | AOE child nutrition staff already conduct regular trainings every year. This existing training schedule will be leveraged to train users on the new system. CCG will train AOE child nutrition staff in a train-the-trainer model. | Agree |
|----|----------|--------------------------------|--|---|---|---|---|----------------------------------|---|--|
| 12 | Planning | Plan Quality | No quality assurance or test plan was available. | L | L | L | Test cases or test plans don't currently exist and would need to be developed for the CCG Child Nutrition Program. | During Implementati on | Test plans will be detailed during the requirements definition phase as the detailed requirements that have been built into the existing system are documented. | Agree, there is a test environment and test process in place and will apply to new patches |
| 13 | Planning | Develop Human Resource Plan | No experienced internal project lead named yet. | н | L | Μ | Name an internal project coordinator, or procure professional Project managements services. | Prior to Contract | AOE has confirmed that Nancy Lewis will serve as AOE project coordinator with primary project management experience being a service delivered by CCG. | Agree, and since this is a low risk project having a project coordinator vs project manager is ok |
| 14 | Planning | Develop Human Resource Plan | Cost of internal resource needs for implementation should to be recalculated. The original cost was based on a 25 week schedule. The proposed schedule is 52 weeks so the cost should be doubled. Also consider FDP resource requirement. | н | н | Н | Recalculate the internal resource needs based on a longer schedule. This will have an impact on the business case analysis. | Prior to Contract | The 25 week schedule represents effort on specific tasks in CCGs proposal where AOE will be involved. This may be accurate OR may need to be expanded by another 6 weeks depending on AOE business decision on whether or not the FDP module will be included in this project. | Agree |
| 15 | Planning | Plan Communications | Formal Communication and project status between AOE team members and project stakeholders is limited | L | L | L | Once a project coordinator is named, responsibility for communcation will come from that person | During Initiation/Star tup | AOE has confirmed that Nancy Lewis will serve as AOE project coordinator with primary project management experience being a service delivered by CCG. Nancy will be responsible for handling coordination and communication between stakeholders. | Agree |

| 16 | Planning | Plan Procurements | Current proposal says prices through June 2014 | L | м | L | Ensure proposal is approved and contract in place prior to 6/30/2014 | Prior to Contract | CCG originally proposed these same rates in September, 2013 and they have not changed as negotiations have been taking place. There is no indication that these prices will change even if a contract is not in place before the end of June but we will work to have a contract in place as quickly as possible. | Agree |
|----|----------|----------------------|---|---|---|---|--|---|---|---|
| 17 | Planning | Plan Procurements | CCG has few Oracle developers | L | м | М | Although the proposal is to move off of the Oracle platform, some expertise is required to perform conversion and rewrite the existing interfaces. | During Implementati on | This has been an issue for CCG for some time and is their primary motivation to complete this project. They will contract Oracle staff to supplement as needed. | Agree |
| 18 | Diamoing | Plan | Any Vermont specific changes beyond the items currently in the oracle system would be an additional costs once moved over to the new platform. Although it doesn' t happen often, there may be some expenses expended to satisfy state specific requirements and there is nothing in the proposal of business case analysis to account for these items. | м | | | Add a contingency in the maintenance budget for state specific | During | AOE will identify funds to include as a contingency for curb state specific shapper | Agree, add a 10% contingency to maintenance costs, increase from \$207 to \$227 v |
| 18 | Planning | Procurements | to account for these items Current Proposal V3 includes the Food Distribution Program (FDP) module, however team interviews indicate module may not be | M | н | н | requirements Determine if FDP should be part of the scope or | Planning Prior to | such state specific changes. This is an AOE business decision that needs to be agreed upon prior to contract | Ş227K |
| 19 | Planning | Procurements | necessary | н | н | н | not. | Contract | execution. | Agree |
| 20 | Planning | Plan | The current CCG platform does not currently have a contract in place. The service contract between CCG and AOE ended on Jan 31,2014. A personal services contract was drafted for the conversion to sql as well as maintenance and support , however that contract was not signed | н | н | н | If the system crashed tomorrow, there is nothing in place to pay for required support. Put a separate personal services contract in place for now until the start of the conversion project | Immediately | AOE contractual staff has an amendment that is being routed internally to extend the maintenance of the current system. | Agree |
| 20 | | . rocurements | 35000 | | | | and conversion project. | ····incolotery | The system merely contains | |
| 21 | Planning | Technical | Sensitive but not identifiable information will be in the system. Details about the data need to be clarified to eliminate any security concerns. | м | L | L | Define the data in the system and the security complaince required. | During Planning/Req uirements Analysis | aggregate meal counts with no identifiable information. Specific data elements of the system will be documented as part of the requirements phase. | Agree |

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| 22 | Planning Planning | Technical | Hosting State data in the cloud is a relatively new environment for DII. The hosting services identified in the proposal do not go into enough detail and a specific hosting contract should be signed. The host company credentials and an SLA for AOE was not available | н | M | M | Although DII does not have a contracted cloud host service, AOE should consider putting a clause in the CCG hosting package to consider migrating the data to the State supported cloud environment, if and when appropriate. A detailed hosting contract needs to be created. Finalize details about hosting company and service. | Prior to Contract Prior to Contract | 6/23: CCG is sending AoE a draft SLA. DII will provide additional security & data integrity requirements as well as password policy requirements. 6/14: AOE is working to obtain SLAs from CCG with their hosting providers. These hosting agreements will be included in the contract prior to execution. AOE will also include clauses about retaining the option to migrate the system to the state private cloud at the state's discretion. 6/26: also AOE is working to obtain SLAs from CCG with their hosting providers. | Agree, also include clause in hosting agreement to migrate and update system code if and when appropriate Agree; see detailed follow-up questions Agree, ensure technical ANF |
|----|----------------------|-----------------|--|---|---|---|--|---|---|---|
| 24 | Planning | Technical | CCG says that the interface for accounts payable data to VISIONs is included, however it is not explicitly mentioned in the proposal. | н | L | L | Add the specific state specific function included as part of the migration effort. | Prior to Contract | This state specific function will be explicitly included as a deliverable in the contract prior to execution. | technical AND business office process changes are made |
| 25 | Initiation | Develop Charter | CCG SaaS experience appears relatively new and maintenance costs are high Include Business Process Analysis in the design stage of system | н | м | н | Solicit an SaaS specific reference; negotiate lower maintenance prices with CCG Ensure time is included | Prior to Contract During Planning/Req uiraments | 6/23: CCG says that VT is paying the same per modelu fee as other states (\$15K per). The difference in price are due to support of VT-specific customizations/configurations. | 545K permodule for customization support seems high; continue negotiating the amount down. Also check with USDA for comparison prices |
| 26 | Planning | Technical | development | н | L | м | and development | Analysis | Agreed | |

Attachment 3 – Lifecycle Cost Benefit Analysis

See Section 8 for a Lifecycle Cost Benefit Analysis.

Attachment 4 – Document Change Control Log

| Date Revised | Authorized by | Description of Change(s) |
|--------------|---------------|--|
| 06/15/2014 | J. Mincar | Condensed executive summary Extended cost model from 5 to 10 years Removed the internal staff costs from acquisition costs Embedded high risk details within the document. Added Risk 25 Included information from CT and MO CCG references |
| 06/26/14 | J. Mincar | Added comments and updates based on 06/16/14 review with Richard, Bill, Brian and Barbara Changed Existing costs Added Risk Mitigation action item results from Brian Added Risk 26 for Business Process Analysis during Design |
| | | |