

SOUTHWEST CLOUD COMPUTING CENTER FEASIBILITY STUDY

Submitted by

The SouthWest Ohio Computer Association

in collaboration with

Hamilton/Clermont Cooperative Association

Metropolitan Dayton Educational Computer Association

Miami Valley Educational Computer Association

South Central Ohio Computer Association

Western Ohio Computer Association

Michael Crumley,

Executive Director, SouthWest Ohio Computer Association

March, 2012

Southwest Ohio Computer Association

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Michael Crumley

Executive Director

The SouthWest Ohio Computer Association (SWOCA) is an Ohio Information Technology Center organized as a Council of Governments under the provisions of the Ohio Revised Code Chapter 167. H/CCA serves 38 districts and a student population of approximately 88,000. Headquarters for the agency are located in Mt. Healthy, Ohio. The service area includes Hamilton and Clermont Counties.

This agency provides numerous shared services to its existing participating school districts. Among these services are financial software and support, student data management, electronic gradebook, Educational Management Information System (EMIS) support, the INFOhio library circulation system, Internet Access, Email, document storage and management, Voice Over Internet Protocol, and many other technical and program related services to Ohio schools and districts.

SWOCA is the lead applicant in the proposal with full access to the benefits of the cloud center if/when it is created. As is true for all of the partner sites, cost data from SWOCA will be included in the study. All of the services currently provided in the regional centers will be evaluated for possible migration to the Cloud center. The determining factor for each service will be cost effective delivery to the end users.

The executed collaborative agreement and supporting resolution from the SWOCA governing board will be provided by April 30, 2012.

Hamilton/Clermont Cooperative Association (H/CCA)

Al Porter

7615 Harrison Ave.

Cincinnati, OH 45231

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513.931.7202

•porter_a@hccanet.org

The Hamilton/Clermont Cooperative Association (H/CCA) is an Ohio Information Technology Center organized as a Council of Governments under the provisions of the Ohio Revised Code Chapter 167. H/CCA serves 38 districts and a student population of approximately 88,000. Headquarters for the agency are located in Mt. Healthy, Ohio. The service area includes Hamilton and Clermont Counties.

This agency provides numerous shared services to its existing participating school districts. Among these services are financial software and support, student data management, electronic gradebook, Educational Management Information System (EMIS) support, the INFOhio library circulation system, Internet Access, Email, document storage and management, Voice Over Internet Protocol, and many other technical and program related services to Ohio schools and districts.

H/CCA is a co-applicant in the proposal with full access to the benefits of the cloud center if/when it is created. As is true for all of the partner sites, cost data from H/CCA will be included in the study. All of the services currently provided in the regional centers will be evaluated for possible migration to the Cloud center. The determining factor for each service will be cost effective delivery to the end users.

The executed collaborative agreement and supporting resolution from the H/CCA governing board will be provided by April 30, 2012.

Metropolitan Dayton Educational Cooperative Association (MDECA)

Jerry Woodyard

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Dayton, OH 45405

937.223.1112

937.223.2385

•woodyard@mdeca.org

Metropolitan Dayton Educational Cooperative Association (MDECA) is an Ohio Information Technology Center organized as a Council of Governments under the provisions of the Ohio Revised Code Chapter 167. MDECA serves _____ districts and a student population of approximately 91,000. Headquarters for the agency are located in Dayton, Ohio. The service area primarily includes Montgomery, Miami and Darke Counties.

This agency provides numerous shared services to its existing participating school districts. Among these services are financial software and support, student data management, electronic gradebook, Educational Management Information System (EMIS) support, the INFOhio library circulation system, Internet Access, Email, document storage and management, Voice Over Internet Protocol, and many other technical and program related services to Ohio schools and districts.

MDECA is a co-applicant in the proposal with full access to the benefits of the cloud center. As is true for all of the partner sites, cost data from MDECA will be included in the study. All of the services currently provided in the regional centers will be evaluated for possible migration to the Cloud center. The determining factor for each service will be cost effective delivery to the end users.

The executed collaborative agreement and supporting resolution from the MDECA governing board will be provided by April 30, 2012.

South Central Ohio Computer Association (SCOCA)

Shawn Clemmons

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Piketon, OH 45661

800-634-8828

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shawn@scoca-k12.org

South Central Ohio Computer Association (SCOCA) is an Ohio Information Technology Center organized as a Council of Governments under the provisions of the Ohio Revised Code Chapter 167. SCOCA serves _____ districts and a student population of approximately 72,000. Headquarters for the agency are located in Piketon, Ohio. The service area includes Ross, Pickaway, Vinton, Pike, Scioto, Lawrence, Adams and Highland Counties.

This agency provides numerous shared services to its existing participating school districts. Among these services are financial software and support, student data management, electronic gradebook, Educational Management Information System (EMIS) support, the INFOhio library circulation system, Internet Access, Email, document storage and management, Voice Over Internet Protocol, and many other technical and program related services to Ohio schools and districts.

SCOCA is a co-applicant in the proposal with full access to the benefits of the cloud center. As is true for all of the partner sites, cost data from SCOCA will be included in the study. All of the services currently provided in the regional centers will be evaluated for possible migration to the Cloud center. The determining factor for each service will be cost effective delivery to the end users.

The executed collaborative agreement and supporting resolution from the SCOCA governing board will be provided by April 30, 2012.

Western Ohio Computer Association (WOCO)

Donn Walls

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Sidney, OH 45365

937.498.2161

937.497.7233

donn@woco-k12.org

The Western Ohio Computer Association (WOCO) is an Ohio Information Technology Center organized as a Council of Governments under the provisions of the Ohio Revised Code Chapter 167. WOCO serves 30 districts and a student population of approximately 35,000. Headquarters for the agency are located in Sidney, Ohio. The service area includes Auglaize, Logan, Hardin, Champaign, and Shelby Counties.

This agency provides numerous shared services to its existing participating school districts. Among these services are financial software and support, student data management, electronic gradebook, Educational Management Information System (EMIS) support, the INFOhio library circulation system, Internet Access, Email, document storage and management, Voice Over Internet Protocol, and many other technical and program related services to Ohio schools and districts.

WOCO is a co-applicant in the proposal with full access to the benefits of the cloud center. As is true for all of the partner sites, cost data from WOCO will be included in the study. All of the services currently provided in the regional centers will be evaluated for possible migration to the Cloud center. The determining factor for each service will be cost effective delivery to the end users.

The executed collaborative agreement and supporting resolution from the WOCO governing board will be provided by April 30, 2012.



SOUTHWEST CLOUD COMPUTING CENTER FEASIBILITY STUDY

3. Project Information

- The name of the project

SOUTHWEST CLOUD COMPUTING CENTER FEASIBILITY STUDY

- A brief project description

This project is the last portion of a feasibility study to advise the development of a "Regional Cloud Computing Center" for use by several Ohio Information Technology Centers and other governmental entities.

The overriding concept is to construct a new facility in Central to Western Butler County. This facility will serve as the new headquarters of the SouthWest Ohio Computer Association Council of Governments, the lead applicant in this proposal. More importantly, the facility will be built with expanded technical capabilities to become a "Cloud Computing Center" for five to seven other Ohio ITCs that become partners in the project. The initial partners provide advanced technology services to over twenty-five counties and serve approximately 405,000 Ohio students in public, private and charter schools. When realized the Cloud Center will also have the capacity to provide Internet and other services to governmental entities such as municipalities, counties, townships, police and fire departments.

A project of this nature requires a "buy-in" from all of the potential collaborators. One of the major roadblocks to this has been a lack of dependable data on the actual cost savings. While there has been much speculation and generalization there has not been enough information on the actual return on investment that could be expected by a specific ITC if they join a Cloud Center for shared services. The singular goal of this study is to fill that information gap.

This study will consist of several parts. First we must study the current capabilities of the five applicant ITCs and the software/services currently offered. Most important is the technical infrastructure and support required to maintain the services of the site. It is assumed that some of these services can be hosted in the proposed Cloud Center with little or no loss of functionality. The cost of providing these services will be determined.

The second determination will be the costs involved in transferring programs, licenses, and equipment to a new site. These must be put into the cost equation.

Third will calculate the cost of running these programs at the Cloud Center

Fourth, a look at the technical staff required to maintain networks and servers at the sites. This will be important if, as expected, the Cloud Center plan will reduce the need for some staff at the applicant ITCs

Finally, we must learn the cost of building a data center of sufficient capacity to handle the new demands of the hosted programs. This will not be a matter of simply duplicating the other four sites. We must be able to leverage the efficiencies of putting this capability in one site to maximize savings.

With all of this data in place, it should be apparent whether there are really short- and long-term savings from the creation of Cloud Centers. This information will advise the parties involved in the decisions to move in this direction. While there may yet be some discourse on whether or not it is "worth it" to create the centers the facts will be available.

This project will be done through the use of one or two consultants or consultant firms. In advance of the grant award date, the partners in this project will create Requests for Proposals and distribute as appropriate. There will likely be two distinct sections: one to evaluate the current situation and another to determine the build costs of the proposed new site.

A local consultant, experienced in such studies, has provided us with a budgetary figure for a study of this type. His estimate is between \$84,000 and \$90,000.00 as indicated in the project budget. We would intend to select our vendor(s) in the month of July and be underway in August. If the results indicate enough savings to justify a transition the partners will take the next step and further discuss the possibilities. While none of the partners are committing to the move at this time the available data will overcome one of the hurdles.

If there is a decision to proceed we would expect to apply for an LGIF loan in the winter, if not the fall, cycle. The decision on that will depend on the timing of the study and the discussions among the parties.

- Identification of the type of award the applicant is seeking (for grants—applicants may apply for feasibility studies, planning or management project awards; for loans—applicants may apply for demonstration type projects)

The applicant is seeking a grant in the amount of \$90,000 to study the financial feasibility of creating “Regional Cloud Centers” through collaboration of Ohio Information Technology Centers.

- Proof of feasibility study determination provided by the Department of Development (applicable to applicants applying for loan funds only)

Not applicable to this submission

- A problem statement (including any information regarding the funds spent on problem related goods or services)

Across Ohio there are 22 Information Technology Centers (ITCs). These agencies are funded primarily through user fees paid by participating schools and school districts and, to a much lesser extent, by the state. ITCs provide student, financial, and library software to districts as well as Internet Access, email, Voice Over Internet Protocol and a great many other vital services. Many of these services are best provided through the geographically distributed regional centers. However, recent “cloud” technologies have made it technically feasible to centralize some of the software applications into larger data centers. By creating private Cloud Centers in and for the Ohio Education Computer Network we can have the advantages of cloud technology without the data security dangers inherent in public Internet Clouds.

Several studies indicate that there may be financial savings by even better use of the shared services already in place in the ITCs. To many it seems to be “common sense.” Others have projected remarkable savings that seem to assume that no shared services are currently being used. The basic problem is the absence of reliable data that quantifies actual savings to be realized by transitioning from “where we are now” to better use of the technical ability to go to a Cloud computing center. ITCs function as small businesses and the financial case has yet to be made. If there are only modest savings it is much more difficult to make the transition. Conversely, if significant savings are readily apparent it will serve as a motivator and justification to the ITC leadership and their districts to move more rapidly in that direction.

- Identification of one targeted approach to innovation (i.e., efficiency, shared service, coproduction, or shared merger)

Shared services - This project will provide information to advise the potential cost savings to be realized through the sharing of some of the functions of five or more Ohio ITCs.

- An explanation of the anticipated return on investment based on the ratio of savings (this item should be derived directly from the project budget required in the financial documentation section of this application)

This project will determine what the anticipated return on investment will be for the proposed cloud projects. We expect that those savings will be realized in hardware, maintenance, licensing, energy, personnel, avoidance of future costs, revenue from new partners, and more. There is little doubt that savings will be created through the cloud projects. The question is "how much?" and does that ongoing savings justify the considerable start up and conversion costs.

- An explanation regarding the probability of the proposal's success (this should be based on any past project implementation, the likelihood of anticipated savings and the plans for project implementation)

Since there is a very specific and limited goal in this project it is certain to succeed. We will determine if there are cost savings to be realized from the deployment of the proposed Cloud Center model of shared service.

- A description of the applicant's plans and ability to replicate or scale the proposal to allow for the inclusion of other political subdivisions

The results of this feasibility study will be shared with the Management Council of the Ohio Education Computer Network and all of the member Information Technology Centers. While the results will be based upon the six sites in the target project, there is enough variety in size and service offering in this group that the results will be applicable to all of the sites. If significant cost savings are predicted it will serve as a model for other sites across the state to move in this direction.

- Identification of whether the proposed project is part of a larger consolidation effort by the applicant or collaborative partner(s)

This project will provide data to advise the decision to create Cloud Centers across Ohio. As noted, it is technically possible to create these centers but there remains some doubt about the actual cost savings of the plans. If the data supports a suitable cost savings the plan to create these centers will move forward. This project is a means of consolidating certain services currently provided separately from six different locations. As additional services become "ready" for a cloud environment we will migrate those to the cloud center as well. Feedback from our users indicates that there is still great value in our regional centers, particularly for support and training. We do not anticipate that this plan will result in fewer ITCs among our partners, just perhaps smaller, more efficient ones accessing the larger Cloud Center as appropriate.

- Identification of past success on an innovation (efficiency, shared service, coproduction or shared merger) project

All of the ITC partners in this project have past successes in shared service. Our basic functions began as long as 40 years ago when school districts joined forces to share large mainframe computers that none could afford individually for their financial applications. Since that time we have each expanded successfully into dozens of shared services. Among these are Student Services, Electronic Gradebooks, financial software with associated packages, Internet, email, document management, Voice Over Internet Protocol, and more.

- A description of how the proposed project is responding to current substantial changes in economic demand for local or regional government services (if applicable)

Numerous studies and projects have been conducted in Ohio seeking ideas for making better use of the various regional centers such as Educational Service Centers and Information Technology Centers. While there has been no evidence from any of these that there are "too many" sites there are indications that some opportunities for efficiency may exist. It is certain that improved technology does make it possible to concentrate some of the services of the ITCs. As the need for efficiencies grows, it is only logical to make the very best use of the taxpayer funded ITCs. Cloud technology makes it possible to create these efficiencies and expand to local and regional governments outside their traditional customer base. Expansion to these other entities will make great use of resources already in place with minimal related costs

- Identification of intent to implement recommendations of a performance or any other audit recommendations.

None of the participating entities are subject to any audit recommendations that specifically address migrating to a Cloud Center. It could be said that this is the newest of many ideas for consolidating the services of regional agencies. This concept has been presented by various studies over the past decade. Among these studies are CELT – (2000), ODE Regionalization (2005), School Funding Advisory Council (2009/2011), KnowledgeWorks (2010), and Ohio Business Roundtable (2010/2011.)

Specifically, the Management Council of the Ohio Educational Computer Network conducted an internal study in the late summer of 2011. This study is included in supporting documentation. A specific recommendation of the study is the creation of three “Cloud Centers” in Ohio. These technical data centers would aggregate many of the existing software installations currently in use and prepare the capability to add services as appropriate in the future. All the collaborating ITCs in this project have “signed on” to this project and have made a financial commitment to its completion

- An explanation of how the project facilitates an improved business environment and/or promotes community attraction

Access to the Cloud Center is intended to provide a more competitive business environment for the participating ITCs and the governmental entities using the services. This project will advise the participants on the best services to transition to the cloud and the resultant savings to be realized. If, as expected, significant savings are projected, numerous governmental agencies will be encouraged to avail themselves of the opportunity to use services from the Cloud Centers.



SOUTHWEST CLOUD COMPUTING CENTER FEASIBILITY STUDY

4. Financial Documentation

SouthWest Ohio Computer Association
 Council of Governments
 Combined Financial Report-All Funds

	FY 09	FY10	FY11
Beginning Cash Balance on July 1	\$ 3,482,726.70	\$ 3,605,882.35	\$ 3,556,047.68
Revenue			
Local	2,643,643.29	2,853,659.91	3,443,442.44
State	698,256.34	619,844.71	556,926.50
Federal	556,601.09	495,987.65	533,152.87
Total Revenue	<u>\$ 3,898,500.72</u>	<u>\$ 3,969,492.27</u>	<u>\$ 4,533,521.81</u>
Expenditures			
Wages 1xx	1,168,805.19	1,312,862.41	1,447,637.13
Fringes 2xx	395,434.46	427,451.09	500,419.53
Purchased Services 4xx	845,461.09	839,037.99	928,760.35
Materials/Supplies 5xx	813,175.73	1,003,113.11	796,083.64
Capital Outlay 6xx	224,121.79	396,657.16	326,061.72
Other Operational Expenditures 8xx (membership fees; legal; etc.)	23,953.66	34,451.32	25,907.12
Transfers Out	277,673.91		208,581.55
Misc.	26,719.24	5753.86	
Total Expenditures	<u>\$ 3,775,345.07</u>	<u>\$ 4,019,326.94</u>	<u>\$ 4,233,451.04</u>
Fund Balance as of June 30	<u><u>\$ 3,605,882.35</u></u>	<u><u>\$ 3,556,047.68</u></u>	<u><u>\$ 3,856,118.45</u></u>

Financial Documentation

A detailed project budget must include separately:

- The most recent three years of financial history

Please see attached document entitled "SouthWest Ohio Computer Association Council of Governments Combined Financial Report-All Funds"

The anticipated project costs:

- Include the amount and type of funds requested

This proposal is for a Feasibility Study grant in the amount of \$90,000.00. A local consultant with experience in studies of this type provided a budgetary estimate for the project as indicated below. Naturally, upon award, the project will use an RFP process for determination of the study consultant.

Total Estimate = \$ 90,000

- Business Analyst = 520 Hours @ \$125/hour (\$ 65,000)
- Project Manager = 20% of Business Analyst Hours is 112 Hours @ \$125/hour (\$ 13,000)
- Subject Matter Experts = 40 Hours @ \$200/hour (\$ 8,000)
- Travel & Expenses = 4 Trips @ \$1,000 per Trip (\$ 4,000)

Work Breakdown (Business Analyst)

Project Preparation & Kickoff (8 Hours)

- Internal & Client Kickoff Meetings
- Deliverable Template Creation
- Unplanned contingencies

Detailed Analysis of Current SWOCA Offerings (70 Hours)

- Capture current & future planned offerings
- Document current datacenter capabilities
- Capture current & future planned staffing model
- Analyze current financial model

Site Visits for Each ITC (80 Hours)

- 20 Hours per Site
- Activities will include:
 - Capture current & future planned offerings
 - Document current datacenter capabilities
 - Capture current & future planned staffing model
 - Analyze current financial model

Aggregate Site Requirements (80 Hours)

- Master services list
- Master financial model
- Master staffing model
- Master datacenter requirements

Estimate Consolidated ITC Costs (80 Hours)

- Facilities
- Staff
- Connectivity
- Unplanned Contingencies

Assess Open-Market Alternatives/Enhancements (40 Hours)

- Data Centers
- Support Centers
- Unplanned Contingencies

Prepare & Present Findings (80 Hours)

- Finalize documentation
- Finalize presentation material
- Finalize spreadsheets
- Presentation of findings

Additional Allocations

- Project Management (20% allocation = 1 day/week)
 - Other "Subject Matter Experts" (50 hours)
 - Travel & Expenses
- Include the percentage of local matching funds available and documentation explaining how the match will be met (must be at least 10% of the total project costs)

Matching funds from the five co-applicants going forward will amount to 10% of the grant application, or \$9000.00. In addition, these applicants have already committed \$10,000 each to the ongoing cloud study for all of the ITCs. While the entire amount is not designated specifically for this project, the Cloud Study document used as the basic foundation of our cost analysis was created from this group. Other research concerning the Regional Clouds funded by the state group will be combined with the specific cost findings of this study. Giving "half credit" for the already expended funds this totals \$34,000.00 or 37% of the grant application.

- Include documentation of any in-kind contributions (documentation must conform to the requirements of §2.06 of the LGIF Policies)

Each of the five sites will have to be engaged with the study consultants to provide the best possible information to inform the study. Based upon the information received in creating this proposal we estimate this at 288 hours across all five sites. The value of this time at SWOCA is approximately \$8100.00. Each of the other four sites will contribute about 48 hours or \$2300.00 each for a total of \$9200.00. This total of \$17,300.00 constitutes another 19% of the grant total.

Total matching funds = 57% of total application.

Loan projects must document and describe expected annual savings and/or one-time savings that will occur as a result of the project (the expected savings should be greater than or equal to the loan amount unless another form of acceptable collateral is provided)

Since the goal of this study is to determine cost savings, it is contradictory to project the specific savings. From other sources we believe that savings will appear in the following areas:

- I. Remote "hot site": savings of approximately \$30,000.00/year
- II. Reduced licensing and storage costs: By reducing the number of instances of programs and better use of disc space we estimate savings of \$40,000.00/year
- III. Reduced staff: Technical staff requirements will be lessened at the sites sharing with the Cloud Center. If only two of these high end people are saved it would result in a savings of approximately \$150,000 per year.

If only these savings are realized we will save \$220,000 per year or 244% of the original grant amount.



SOUTHWEST CLOUD COMPUTING CENTER FEASIBILITY STUDY

5. Supporting Documents

5 – 1
Resolutions of Support

Collaborative Agreement and Resolutions of Support

The resolution of the SWOCA Council Board of Directors is enclosed. The remaining documents will be submitted prior to the April 30 deadline.



RESOLUTION

WHEREAS: The State of Ohio through HB 153 has created the Local Government Innovation Fund encouraging local governmental entities to promote efficiencies through collaboration and shared services and

WHEREAS: The SouthWest Ohio Computer Association Council has long been an advocate of shared services between and among school districts and

WHEREAS: The SouthWest Ohio Computer Association Council is interested in expanding its collaborative and shared services offerings with other Ohio Information Technology Centers, Ohio Schools, and other governmental entities in Ohio and

WHEREAS: The funds available through the Local Government Innovation Fund would be of great value in achieving these goals:

NOW, THEREFORE: The Executive Committee of The SouthWest Ohio Computer Association Council makes the following resolutions:

- 1.) The SouthWest Ohio Computer Association Council Executive Committee supports participation in the Local Government Innovation Fund
- 2.) The Executive Director is authorized to collaborate with other Information Technology Centers, Ohio Schools, and governmental entities in the preparation of one or more grant and/or loan applications through the Local Government Innovation Fund.
- 3.) The SouthWest Ohio Computer Association Council will appropriate, as recommended by the Executive Director, SWOCA's fair share of the matching funds required under these applications.

Motion _____

Second _____

Vote Ayes _____ Nays _____

Resolution _____

January 26, 2012



SOUTHWEST CLOUD COMPUTING CENTER FEASIBILITY STUDY

5. Supporting Documents

5 – 2
Self Review

Local Government Innovation Fund Program

Application Scoring

Lead Applicant	SouthWest Ohio Computer Association
Project Name	SOUTHWEST CLOUD CENTER FEASIBILITY STUDY

<input checked="" type="checkbox"/>	Grant Application
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or

<input type="checkbox"/>	Loan Application
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The Local Government Innovation Fund Council
77 South High Street
P.O. Box 1001
Columbus, Ohio 43216-1001
(614) 995-2292

5-2-1

Local Government Innovation Fund Project Scoring Sheet

Section 1: Financing Measures

Financing Measures	Description	Criteria	Max Points	Applicant Self Score	Validated Score
Financial Information	Applicant includes financial information (i.e., service related operating budgets) for the most recent three years and the three year period following the project. The financial information must be directly related to the scope of the project and will be used as the cost basis for determining any savings resulting from the project.	Applicant provides a thorough, detailed and complete financial information	5	<input checked="" type="radio"/>	
		Applicant provided more than minimum requirements but did not provide additional justification or support	3	<input type="radio"/>	
		Applicant provided minimal financial information	1	<input type="radio"/>	
		Points		5	0
Repayment Structure (Loan Only)	Applicant demonstrates a viable repayment source to support loan award. Secondary source can be in the form of a debt reserve, bank participation, a guarantee from a local entity, or other collateral (i.e., emergency rainy day, or contingency fund, etc.).	Applicant clearly demonstrates a secondary repayment source.	5	<input type="radio"/>	
		Applicant does not have a secondary repayment source.	0	<input type="radio"/>	
		Points		0	0
Local Match	Percentage of local matching funds being contributed to the project. This may include in-kind contributions.	70% or greater	5	<input type="radio"/>	
		40-69.99%	3	<input checked="" type="radio"/>	
		10-39.99%	1	<input type="radio"/>	
		Points		3	0
Total Section Points				8	0

Section 2: Collaborative Measures

Collaborative Measures	Description	Criteria	Max Points	Applicant Self Score	Validated Score
Population	Applicant's population (or the population of the area(s) served) falls within one of the listed categories as determined by the U.S. Census Bureau. Population scoring will be determined by the smallest population listed in the application. Applications from (or collaborating with) small communities are preferred.	Applicant (or collaborative partner) is not a county and has a population of less than 20,000 residents	5	<input type="radio"/>	
		Applicant (or collaborative partner) is a county but has less than 235,000	5	<input type="radio"/>	
		Applicant (or collaborative partner) is not a county but has a population 20,001 or greater.	3	<input type="radio"/>	
		Applicant (or collaborative partner) is a county with a population of 235,001 residents or more	3	<input checked="" type="radio"/>	
		Points		3	0
Participating Entities	Applicant has executed partnership agreements outlining all collaborative partners and participation agreements and has resolutions of support. (Note: Sole applicants only need to provide a resolution of support from its governing entity.)	More than one applicant	5	<input checked="" type="radio"/>	
		Single applicant	1	<input type="radio"/>	
		Points		5	0
Total Section Points				8	0

Local Government Innovation Fund Project Scoring Sheet

Section 3: Success Measures

Success Measures	Description	Criteria	Points	Applicant Self Score	Validated Score
Expected Return	<i>Applicant demonstrates as a percentage of savings (i.e., actual savings, increased revenue, or cost avoidance) an expected return. The return must be derived from the applicant's cost basis. The expected return is ranked in one of the following percentage categories:</i>	75% or greater	30	<input checked="" type="radio"/>	
		25.01% to 74.99%	20	<input type="radio"/>	
		Less than 25%	10	<input type="radio"/>	
		Points	30	0	
Past Success	<i>Applicant has successfully implemented, or is following project guidance from a shared services model, for an efficiency, shared service, coproduction or merger project in the past.</i>	Yes	5	<input checked="" type="radio"/>	
		No	0	<input type="radio"/>	
		Points	5	0	
Scalable/Replicable Proposal	<i>Applicant's proposal can be replicated by other local governments or scaled for the inclusion of other local governments.</i>	The project is both scalable and replicable	10	<input checked="" type="radio"/>	
		The project is either scalable or replicable	5	<input type="radio"/>	
		Does not apply	0	<input type="radio"/>	
		Points	10	0	
Probability of Success	<i>Applicant provides a documented need for the project and clearly outlines the likelihood of the need being met.</i>	Provided	5	<input checked="" type="radio"/>	
		Not Provided	0	<input type="radio"/>	
		Points	5	0	
Total Section Points				50	0

Section 4: Significance Measures

Significance Measures	Description	Criteria	Points Assigned	Applicant Self Score	Validated Score
Performance Audit Implementation /Cost Benchmarking	<i>The project implements a single recommendation from a performance audit provided by the Auditor of State under Chapter 117 of the Ohio Revised Code or is informed by cost benchmarking.</i>	Project implements a recommendation from an audit or is informed by benchmarking	5	<input checked="" type="radio"/>	
		Project does not implement a recommendation from an audit and is not informed by benchmarking	0	<input type="radio"/>	
		Points	5	0	
Economic Impact	<i>Applicant demonstrates the project will promote a business environment (i.e., demonstrate a business relationship resulting from the project) and will provide for community attraction (i.e., cost avoidance with respect to taxes)</i>	Applicant clearly demonstrates economic impact	5	<input checked="" type="radio"/>	
		Applicant mentions but does not prove economic impact	3	<input type="radio"/>	
		Applicant does not demonstrate an economic impact	0	<input type="radio"/>	
		Points	5	0	
Response to Economic Demand	<i>The project responds to current substantial changes in economic demand for local or regional government services.</i>	Yes	5	<input checked="" type="radio"/>	
		No	0	<input type="radio"/>	
		Points	5	0	
Total Section Points				15	0

Section 5: Council Measures			
Council Measures	Description	Criteria	Points Assigned
Council Preference	Council Ranking for Competitive Rounds	The Applicant Does Not Fill Out This Section; This is for the Local Government Innovation Fund Council only. The points for this section is based on the applicant demonstrating innovation or inventiveness with the project	
Total Section Points (10max)			

Scoring Summary

	Applicant Self Score	Validated Score
Section 1: Financing Measures	8	0
Section 2: Collaborative Measures	8	0
Section 3: Success Measures	50	0
Section 4: Significance Measures	15	0
Total Base Points:	81	0

Reviewer Comments



SOUTHWEST CLOUD COMPUTING CENTER FEASIBILITY STUDY

5. Supporting Documents

5 – 3
Population

Population

Neither the lead applicant nor the co-applicants are a county. This collaboration represents over 150 school districts in over 20 counties. Student population of the consortia is approximately 406,000.



SOUTHWEST CLOUD COMPUTING CENTER FEASIBILITY STUDY

5. Supporting Documents

5 – 4
MCOECN Cloud Study

Ohio Education Computer Network¹

... providing efficient, effective and secure technology that enables student learning in a 21st Century economy that demands global competitiveness.

**Strategic Planning Workgroups Report
September 2011**

¹ OECN – The Original Education Cloud Network

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Overview of MC-OECN Strategic Planning Workgroups

In July 2011, the MC-OECN chartered five workgroups as part of its cloud strategic planning initiative. The purpose of the workgroup activities was to inform the MC-OECN cloud strategy for implementing a proposed cloud infrastructure for ITCs and their school district customers.

The workgroup topics were:

- Technical Architecture
- Applications Architecture
- Investment Management
- Organizational Development
- Governance Model

Each workgroup started with a topic main objective, a set of working assumptions, access to source documents, and a list of suggested questions to consider. When appropriate, a workgroup revised the working assumptions and suggested questions. For reading clarity of this report, some questions and answers have been slightly edited to use consistent terms and phrases. These edits do not materially change the significance of the workgroup outcomes.

Participation included ITC directors and appointed staff and MC-OECN staff; 17 of the ITCs participated in the workgroups. Workgroups met four to six times during July and August. Two of the workgroups, Technical Architecture and Applications Architecture, made interim presentations in late July at the ITC director's retreat.

This report is a compilation of the outcomes from these workgroup activities. It includes their suggestions or recommendations related to the workgroup main objective as well as responses to the questions answered by the workgroup.

The report table of contents includes all of the questions answered by each workgroup. At the end of this report is an index of many key terms, phrases and proper names used in the report.

Comments or corrections to this report can be sent to Andrew Tompkins at Tompkins@mcoecn.org.

Technical Architecture Workgroup

Objective

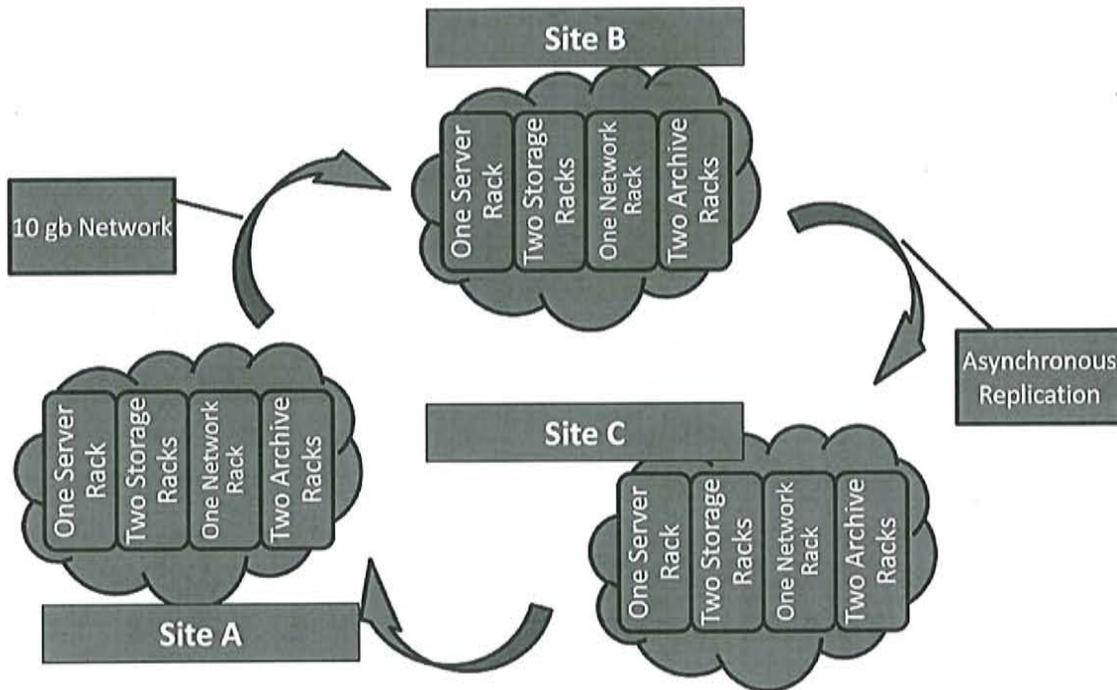
Validate the proposed cloud architecture.²

Working Assumptions

1. MC-OECN regional cloud data centers will be on a highly virtualized x86 architecture capable of hosting a variety of x86 applications on multiple operating systems including Windows, Linux, UNIX, and potentially OpenVMS.
2. Some technology will need to be allocated to supporting non-cloud capable applications.
3. Assumed physical-to-virtual ratio of one physical server for every 40 virtual servers. With ten servers in a chassis, 400 virtual servers can be hosted per chassis.

Summary

The technical architecture workgroup determined that there should be three cloud data centers with the following high-level architecture and initial capacities:



Questions and Answers

What server architecture is needed to achieve high-availability and fault tolerance for Tier-1 applications?

Tier-1 applications typically require high availability (e.g., 99.999% uptime). Per this definition, no application in the OECN currently is a Tier-1. The applications architecture workgroup agrees with this assessment.

² The proposed cloud architecture considered by the workgroup was proposed at an ITC Directors Meeting in May 2011. The workgroup recommendation refined and enhanced the original proposal.

What server architecture is needed to achieve application “snap-shotting” for non-Tier 1 applications?

- Single-chassis
- Backplane redundancy
- Interconnect redundancy
- Administrative redundancy

What server architecture is needed to augment or replace hardware already owned by the OECN collectively?

The server architecture should be based on a “Greenfield” which builds out a new environment with new hardware. The cost and complexity of using existing hardware is too great.

What server architecture is needed to accommodate existing and future growth for Ohio K-12 and potentially local government

To accommodate existing and future growth for both Ohio K-12 and, potentially, local government, each chassis will have excess virtual machine (VM) capacity and excess rack space will exist for adding more chassis.

What storage architecture is needed to achieve high-availability and fault tolerance for Tier 1 applications?

Tier-1 applications typically require high availability (e.g., 99.999% uptime). Per this definition, no application in the OECN currently is a Tier-1. The applications architecture workgroup agrees with this assessment.

What storage architecture is needed to achieve application “snap-shotting” for non-Tier 1 applications?

- RPO less than 2 hrs
- RTO less than 6 hrs
- Design a ring network of the three data centers with asynchronous replication between the three sites
- Single storage vendor
- Same site design for all three data centers
- Modular storage
- Archiving not yet addressed; will be in the future

What storage architecture is needed to augment or replace hardware already owned by the MC-OECN collectively?

The storage architecture should be based on a “Greenfield” which builds out a new environment with new hardware. The cost and complexity of using existing hardware is too great.

What storage architecture is needed to accommodate existing and future growth for Ohio K-12 and potentially local government?

To accommodate existing and future growth for Ohio K-12 and, potentially, local government, the storage architecture should be built for double current capacity demands. Given small space footprint, more storage racks can be added as required.

What network architecture is needed to deliver high-performance, robust applications hosted today and in the future by the cloud?

- Current fiber or cable is sufficient for administrative applications.
 - These have low data consumption by applications

- Will need to expand bandwidth to accommodate some future applications (e.g., desktop virtualization)
- Will need to determine providers.
 - Look for alternatives (Horizon, etc.)
- If cloud data centers are at existing ITCs, they should be logically separated, use separate equipment, and potentially be managed remotely and from an external site.
 - Direct cloud access can be allowed for administrative applications (e.g., parents from home)
 - Network impact is a major factor in determining which applications are allowed direct access, and which go through ITCs

What network architecture is needed to address high availability and fault tolerance capabilities?

- Ring network between three data centers
- Logical separate network for communication between sites
 - Separate from customers
- Same vendor for network equipment
- Redundant switches at each site
- Note that last mile is excluded from this analysis

What are the decision criteria needed for determining the number of cloud data centers?

- N+1 redundancy
- Adequate bandwidth of network
- Architectural flexibility – ability to expand and to compensate for loss of data center site
- Cost (balanced against all the above)

What are the site selection criteria needed for determining the location of cloud data centers?

- Sufficient, redundant N+1 power
- Sufficient cooling capacity
- Sufficient floor space
- Fire suppression
- Multiple reliable ISP
- Physical security and segmentation
- Network proximity to existing ITCs as well as to other cloud data centers
- Physical proximity to vendors
- Protection from disaster
- Access / ramp / freight elevator
- Cable management

Should the MC-OECN acquire new data center locations or use existing ITC sites?

- Both are possible.
- New data center sites offer flexibility of location and increased operational transparency, but may involve significant upfront investment.
- Existing ITC sites have low construction costs.
- Considerations should be given about asset ownership as well as complications around view of new service delivery model.

If existing ITC sites are used, how will the OECN objectively choose which existing ITC sites will be utilized?

- The aforementioned site selection criteria will be used to determine cloud data center locations.
- Sites will be assessed and rated by an objective third party.
- ITC directors will have the opportunity to vote on criteria.
- Cloud data center locations will be logically separate, with separate hardware, network, and organization management.

How many cloud data centers do we need?

- Three
- N+1, ring architecture; ensures one is always up
- Asynchronous replication
- We can always expand in the future as necessary

What is the estimated floor space and/or estimated number of racks needed for each cloud data center?

- one rack for network
- two racks for storage
- one rack for server
- two racks for archive data
- will have extra room in server and network racks

How should expansion into local government markets be factored into technical architecture requirements?

- Since local governments will only be served according to our educational architecture standards, expansion into non-K-12 (local government) markets should not impact our architecture.
- The various schools and local government agencies are all using different operating systems, hardware, hypervisors, etc. Supporting all these will dramatically increase cost and complexity.
- These different organizations are all operating under different business plans, with different needs, different competition, etc.
- Non-K-12 (local government) infrastructure will likely need to be separated from Ohio K-12 infrastructure.

What management capabilities should be contemplated for investigation as a required capability for implementation?

- Will need SOC 1 compliance
- NOC capability
 - Physical and virtual monitoring
 - Networking and storage monitoring
 - Monitoring does not need to be on-site
- Change management processes
- Inventory controls
- Contract administration
- Physical security

What provisioning capabilities should be contemplated for investigation as a required capability for implementation?

- Self-provisioned virtual machines
 - Not necessarily available at first

- A selling point to ITCs
- Would save significant manual entry by staff
- Firewall
- Network bandwidth
 - Capabilities to self-procure -and pay for- increased application bandwidth
 - Requires a unique set of policies to manage due to constraint

What security capabilities should be contemplated for investigation as required for implementation?

- Logical separation of ITCs on cloud network
- Firewalls for each server (possibly)
- VLAN to each ITC (allowing servers to be behind ITC firewalls)
- Potentially multiple VLANs to each ITC
 - Storage, Web, Dev, Test, etc.
- Patch management handled by ITCs
- Infrastructure security at cloud data center
 - Particularly for cloud applications which can be accessed directly by public

Applications Architecture Workgroup

Objective

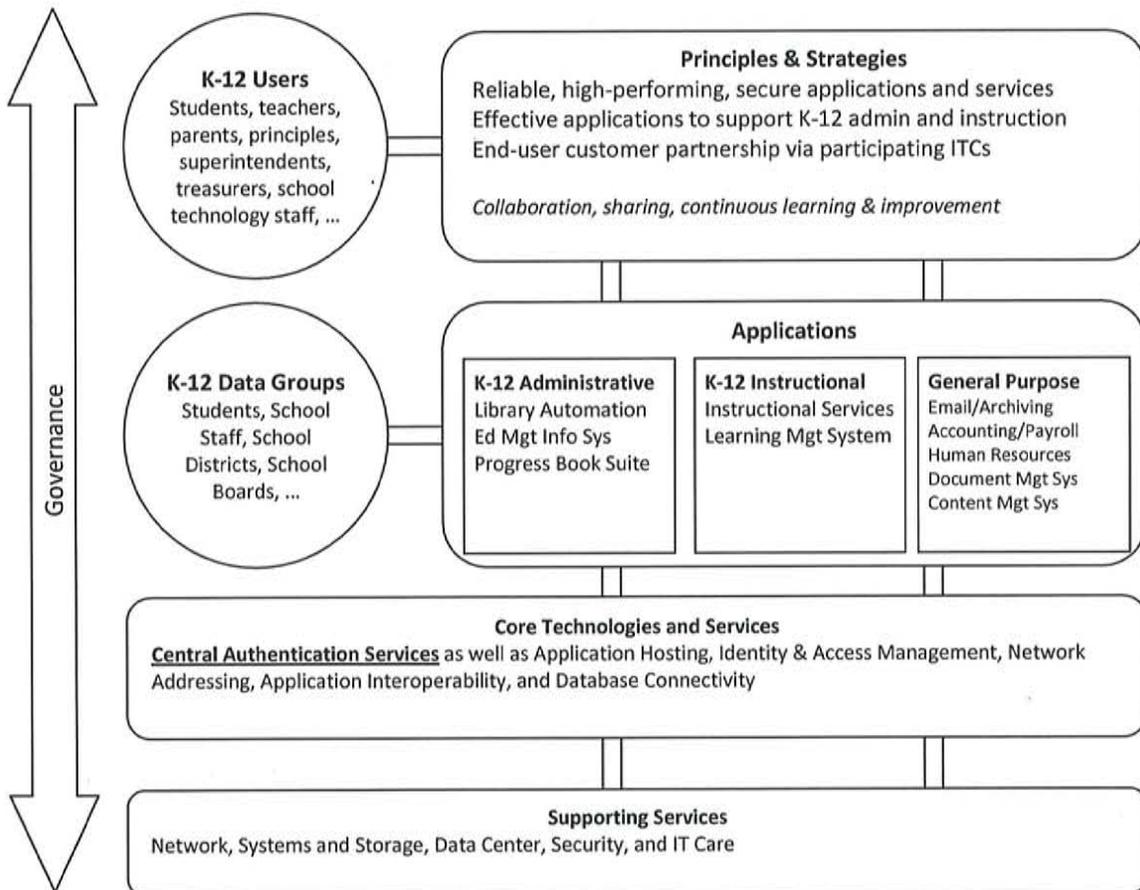
Determine what OECN core applications should be run in the proposed cloud infrastructure.

Working Assumptions

1. Applications will be moved to and hosted in cloud data centers.
2. Physical servers and storage will be managed by cloud staff.
3. Applications provisioned from the cloud will be managed by ITC application specialists, or by application specialists within the cloud organization if desired.
4. Cloud data centers will be “cloud-ready” and capacity will exist for any and all proposed application migration.

Summary

The applications architecture workgroup determined that the following should be the target architecture for the initial MC-OECN cloud applications architecture.



5-4-12

Questions and Answers

What core enterprise application and common regional applications are cloud candidates?

The applications workgroup considered the long list of OECN applications itemized and determined that the following core enterprise applications should be evaluated further as cloud candidates:

- INFOhio Library Automation: SirsiDynix Symphony (Java client, StaffWeb client, CAT/CAT JR, Web Services, State catalogs); Attendance Package; Discovery Portal (SyrsiDynix hosted application)
- K-12 Instructional Applications (INFOhio portal): INFOhio subscribed Electronic Resources; INFOhio's 21st Century Learning Commons; INFOhio Digital Video Collection; Various INFOhio content collections; ITSCO's Literature Lounge BookTalks; Sharepoint for INFOhio Central use
- Progress Book Suite: DASL Module including DASLr and Cornucopia; Gradebook Module; Special Education Module; DataMap; LMS
- EMIS-R

What criteria determines whether an application is cloud-qualified?

The applications workgroup determined that an application must meet at least one of four mandatory criteria to be considered cloud-qualified:

1. **Agreements in Principle** – Participating ITCs agree that migration or creation of a particular application in the cloud makes good business sense and presents a benefit.
2. **Application will generate efficiencies that drive a measurable ROI** – These efficiencies could be lower staff cost or operating expenses.
3. **Application will allow expansion to new markets** – The application can be used to expand into other Ohio markets such as local government.
4. **Application is cloud-friendly** – Vendor has created the application to be provisioned in a cloud environment and it will not require significant additional development to be migrated.

Cloud Candidates: Administrative Applications

Selection Criteria	Library Automation	EMIS-R	Progress Book Suite
Agreement in principle	X		
Is "cloud friendly"	X	X	X
<i>Existing cloud-based working model or proof of concept</i>	X		
<i>Urgency to mitigate a known business risk</i>	X		
<i>Cloud provisioning will prevent "stop gap" spending</i>	X		
No data issues	X		
Minimal or manageable risk	X	X	
Improved availability or operational reliability	X	X	X
Vendor issues are not a barrier	X	X	X
Will lower vendor licensing and support fees	X		
Greater efficiencies in shared technical resources	X	X	
Measurable operational efficiencies for participating ITCs	X		

5-4-13

Cloud Candidates: K-12 Instructional Applications		
Selection Criteria	Instructional Services	Learning Management Systems
Agreement in principle	X	<i>The workgroup did not identify an LMS solution at this time.</i>
Is "cloud-friendly"	X	
Existing cloud-based working model or proof of concept	X	
Minimal or manageable risk	X	
Improved availability or operational reliability	X	
Vendor issues are not a barrier	X	
No data issues with protection, retention and ownership	X	

What criteria will determine their cloud implementation priority?

The following four criteria were identified to be used for determining cloud application priority (sequencing):

1. Existing working model exists or proof of concept (weight = 4)
2. Urgency to mitigate a known business risk (weight = 3)
3. Cloud provisioning will prevent unnecessary spending or investment (weight = 2)
4. Application will generate efficiencies that drive a measureable ROI (weight = 1)

What applications are not cloud candidates and why?

- D3A2: This ODE application suite is not controlled by individual ITCs; use is expected to continue as presently implemented. There is uncertainty surrounding the project future and appropriate funding which are beyond the control of ITCs.
 - The applications workgroup recommends that consideration be given to identifying a cloud-based solution to the data analysis requirement as part of the ongoing strategic planning for the MC-OECN cloud.
- USAS/USPS: These legacy Alpha applications are expected to be replaced with "cloud friendly" implementations (USASr/USPSr) sometime in the next 24 months. Plans call for a working prototype and milestone release in the fall of 2011. This puts the applications outside of the Cloud One timeline being contemplated. When USASr/USPSr are ready, the selection and sequencing processes will be applied to determine their viability as a cloud-qualified offerings.
 - The applications workgroup believes that USASr/USPSr should be field tested from the MC-OECN cloud, but there may be timing and other project issues that prevent this in the near term.

What impacts and changes to application support systems will need to be considered?

- Local application hosting
- Identity and access management
- Network addressing
- Application interoperability
- Database connectivity

5-4-14

What core enterprise and common regional applications are Tier 1 and require high-availability and fault-tolerance?

Tier-1 applications typically require high availability (e.g., 99.999% uptime). Per this definition, no application in the OECN currently is a Tier-1. The technical architecture workgroup agrees with this assessment. The applications workgroup suggested the following application criticality rating:

- **Mission Critical: widespread business stoppage with significant impact to school district operations; risk to human health / environment; public / wide-spread damage to organization's reputation**
- Business Essential: direct school district operations impact and negative customer satisfaction
- Business Core: indirect school district operations impact and negative customer satisfaction
- Business Supporting: moderate employee productivity degradation

What OECN application assets could be leveraged in local government markets?

The applications workgroup did not select an existing OECN applications that might be leverage in local government markets. They determined that the following general purpose applications or solutions should be considered for implementation in the cloud because they might facilitate expansion into new markets such as local government:

- Email with Archiving
- Accounting and Payroll
- Human Resources
- Document Management
- Content Management

How will the existing application staffing support model change to support cloud hosting?

Applications provisioned from the cloud will be managed by ITC application specialists, or by application specialists within the cloud organization if desired.

Investment Management Workgroup

Objective

Recommend an investment strategy for the MC-OECN cloud that drives the value proposition of delivering efficient and effective administrative and instructional technology services.

Working Assumptions

1. Working capital for investing in additional services will come from efficiencies generated by moving to the cloud-based model.
2. This working capital will be invested in projects that will reduce costs or enable learning and improve student outcomes.
3. Available capital to invest initially estimated to be \$10M - \$30M over five years.

Summary

The investment workgroup determined that the following investment principles should be followed when contemplating re-investing cloud efficiencies:

- Pay dividend to participating ITCs as a priority, then allocate the remaining as follows:
- Administrative Applications and Cloud Services 30%
- Ohio K-12 Instructional Applications and Cloud Services 60%
- Cloud Workforce Development and Cloud R&D 10%

The investment workgroup acknowledged that variances from these investment principles may occur when deemed appropriate by the investment advisory function which exists as a governance process for cloud portfolio management.

Questions and Answers

How can existing ITC applications be expanded or enhanced in ways which result in additional economic efficiencies?

The investment workgroup considered an investment proposal for INFOhio, but did not conclude whether such an investment would result in additional economic efficiencies.

What additional administrative computing applications need to be implemented to enable school decision making or reduce costs?

The investment workgroup did not identify specific K-12 administrative computing applications that need to be implemented. They identified the following general purpose business applications to be considered that would facilitate expansion into new markets:

- Email with archiving
- Accounting and payroll
- Human resources
- Document management

Should the OECN consider a dividend for its members?

The investment workgroup defined the term “participating ITC” to mean a particular ITC that makes a financial or other in-kind investment in the MC-OECN cloud startup. The workgroup recommended that a “dividend” be paid to these participating ITCs.

What are the implicit or explicit benefits (of a dividend) from the customer’s point of view?

The investment workgroup determined that a participating ITC would determine the implicit or explicit benefit from a school district’s point of view that might result from a “dividend” paid from the cloud operations to the participating ITC.

What suite of core enterprise instructional tools that result in more effective student outcomes could the OECN provide?

The investment workgroup recommends that INFOhio be included in the initial cloud.

How can existing OECN instructional learning tools be leveraged?

The workgroup considered an investment proposal for INFOhio, but did not conclude whether such an investment would result in additional economic efficiencies.

Can Ohio K-12 efficiencies generated by the cloud-infrastructure be invested for non-K-12 customers?

Without an outside legal opinion, the workgroup believes that efficiencies generated by the cloud infrastructure can be invested at the discretion of the MC-OECN.

How will cost-recovery for capital investments made on behalf of Ohio K-12 be recovered by non-K-12 customers?

Without an outside legal opinion, the workgroup believes that cost recovery for capital investments can be recovered at the discretion of the MC-OECN.

Should cloud-efficiencies be invested in OECN workforce development?

The workgroup recommends that at least 10% of the cloud efficiencies be invested in the cloud organization workforce development and cloud technology and market R&D.

What does a five-year investment plan road-map look like? What percentage of assets should be devoted to each category?

The workgroup defined “CloudOne” as the initial period of time in which the cloud is planned, built and operated (estimated to be between 18 and 24 months). It is not expected that the cloud operations will generate efficiencies that will be reinvested.

The workgroup defined “CloudTwo” as the follow-on period of time (estimated to be years 3 through 5) during which the cloud operations will generate efficiencies that will be reinvested.

Given these assumptions, the workgroup recommended paying dividends to the participating ITCs as a priority. Of the remaining investments, the investment principles and proportions that should be made are:

- Administrative Applications or Other General Business Applications 30%
- Ohio K-12 Instructional Applications and Cloud Services 60%
- Cloud Workforce Development and Cloud Technology and Market R&D 10%

5-4-11

Organization Development Workgroup

Objective

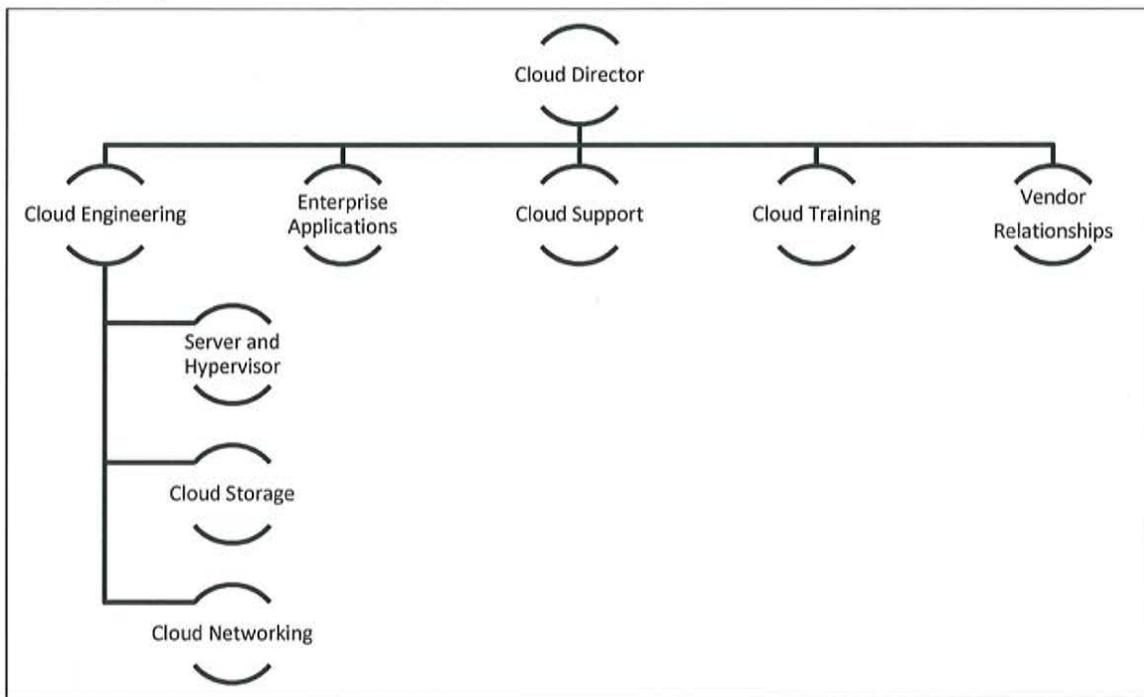
Recommend a future labor organization model that includes all ITCs and the cloud service delivery organization.

Working Assumptions

1. The future organization will include both regionally-based cloud delivery sites and existing ITCs.
2. Realized cloud efficiencies will be invested in additional or new knowledge, skills and abilities; especially in infrastructure, applications, IT support/service desk, IT governance, enterprise procurement and customer-facing services.
3. Initial estimates indicate potential ability to free up 50+ FTE across OECN.

Summary

The workgroup recommends a cloud organization as follows:



The cloud organization is a team of highly-specialized technicians that oversees all three cloud data centers. The cloud organization relies heavily on process and technical skills. This organization model allows ITCs to focus more on customer service, sales and new market development. ITCs can maintain unique applications as needed but have fewer responsibilities and can specialize in customer-facing services.

Questions and Answers

What are the components of the organization that will see increases in staffing?

Customer-facing services staffing will likely see increases. The following may be increased, but the increase is not directly caused by the cloud implementation:

- IP telephony
- Marketing
- Business development
- Legislative representation

What impact to knowledge, skills and abilities will result from changes to the current infrastructure and application delivery models?

Generally, the cloud organization will require skill sets in areas that are already staffed, but those skill sets will need to go significantly deeper.

In contrast, the ITCs will likely find themselves demanding even more breadth in their employee skill sets, as their role will become even more customer-focused and the ability to service more needs can be met. Alternately, if ITCs decide not to provide new forms of customer service, the potential exists to specialize in customer service roles as well.

Management practices will need to shift such that ITCs will need to improve their service provider management skills, while the cloud organization will focus more deeply on being a technical service delivery organization.

What additional knowledge, skills and abilities will be needed?

Cloud organization will require more skills in these areas:

- Process
- Marketing
- Communication (among ITCs)
- VMware and virtualization
- Deeper DBA skills
- Deeper network skills
- Controls and security skills
- Plant management skills
- Operations management skills

ITCs will require more skills in these areas:

- Bandwidth management skills (QOS, etc.)
- Governance and policy skills
- Contract management skills
- DBA depth and breadth

What existing knowledge, skills and abilities will be in less demand?

ITCs will require fewer capabilities in these areas:

- OpenVMS
- Sun Solaris
- Hardware installation and maintenance
- INFOhio

How and by who will newly needed skills be identified?

ITC demand will fuel cloud skill requirements, and cloud services will impact ITC staffing. Governance processes within both organizations will identify needed skill.

What will help ITC directors support the transition to the cloud?

- Strong value proposition, which will be different for different ITCs and their boards.
 - Increased performance
 - Reduced risk and improved uptime
 - Lower cost
- Open, honest communications
- Strong governance
 - Not getting bogged down in administrative layers
 - The Governance Model workgroup is working on this

Currently, each ITC manages its own application and technology architecture, relationships, customer support, market development, etc. Some ITCs rely on others for varying services. ITC relationships with school districts are their strongest asset as an organization, and the best link to other organizations within those communities.

Going forward, ITCs would transfer infrastructure to the cloud organization. The cloud organization handles infrastructure and applications (assets and staffing), if desired. Resources are utilized by the ITCs at their discretion, but are managed by the cloud organization. Only ITCs are customer-facing; all contact and relationships continue to stay at the ITC.

Going forward, the cloud organization is in charge of cloud application support, development, and delivery. They handle tier-2 and tier-3 support for cloud applications. Without the burden of managing an IT infrastructure, ITCs can focus on market development, increased sales, school district relationship building, and supporting customers.

How will we staff the cloud?

- Post job openings and give preference to existing ITC staff.
- Force transitions? (probably not a good idea)
- Set up a cloud advisory board with a cloud director who works for MC-OECN CTO.

How will we fund the cloud?

- Implementation
- Ongoing operation
- ITC buy-in (participation)
 - Provide rebates or discounts to participating ITCs.

How will we transfer to using the cloud?

- Pilot cloud applications
- Help desk, Kiosk, INFOhio
 - Build 1 or 2 of the cloud data centers first
 - Could use current DR infrastructure
- Deal with “loss psychology”
 - Everyone will lose something
 - Old way of doing things

- Talk about what is to be gained

What is the best estimate organization chart of the future organization?

The workgroup adopted the following principles for organizational design:

- Flat structures, avoid 1-on-1 relationships
- Manageable spans of control (span often depends on work type)
- Short chains of control and direction
- No overlaps of role or gaps between accountabilities
- For different groups, planning and control should not be separated from the “doing” activity

The workgroup considered the following possible organization types:

1. Functional – responsibilities divided by group’s output or service (for example, data center networks, USAS, etc.). This is good for smaller organizations focused on more operational-level work.
2. Divisional – responsibilities divided by group’s competencies (for example, marketing, IT, etc.). This approach is good for managing groups based on competencies and is designed to manage groups of sub-specialists and systems within a single specialty.
3. Portfolio – responsibilities are divided by lines of business. This approach is used to organize multiple businesses with their own unique but divisions and functions. It is used when a parent organization manages multiple discreet organizations.
4. New Product Development Organizations – responsibilities can use a matrix structure (multiple staff working across multiple lines on multiple projects), team structure (members from different functions come together on a team to get a project completed), or network structures (different functions contracted out to different groups or organizations).

The workgroup identified the organization chart at the beginning of this section as the best estimate of the organization chart for the future cloud organization. Engineering and applications employees rotate duties annually as site coordinators, support team assistants, and training development assistants.

Where will the enterprise procurement group fit into this model, and what will its scope be?

Cloud procurement will be managed by the cloud director and approved by the TSG. The cloud director will sit on the TSG and will be responsible for overseeing the cloud infrastructure procurement needs.

What does the infrastructure and application support organization look like for regional cloud entities and individual ITCs?

- Tier-1 support is at the ITC
- Tier-2 support is at the cloud organization
- Tier-3 support is at the application owner (either applications group or cloud)
- ITCs remain customer-facing service and sales organizations, (and may have financial incentives for selling cloud services?)
- Infrastructure is owned and operated by the cloud organization
- Non-cloud applications are owned by the developers
- Cloud applications fall under the purview of the cloud organization

What are the most important factors that will drive a successful organization change?

- Director commitment and consensus around the plan
- Director trust (of each other, and of their dependence on the cloud organization)
- Compelling reasons:
 - Lower cost
 - Improved service
 - Business continuity / disaster avoidance (noted that some ITC sites already have 99.999% uptime)
- Superintendent Board buy-in
- Politics
 - Has to look credible
 - ITC competition
 - Fears of over standardization and lack of flexibility (forcing ITCs to all operate a certain way)
- Strong cloud processes to build confidence from ITCs to move over
- Adequate network bandwidth
- Well-designed migration plan
- Business model
- Vision (well-communicated)
- Protocol for providing services and commitment of availability
- Demonstrated efficiencies
- External marketing
- Management support
- Transition management
 - Helping people through their own change in roles and relationships within the organization
 - Institutionalize the change

What additional services and entities will likely be supported in the future?

ITC demand will drive the cloud organization, and cloud services will affect ITC offerings.

- Possible future services:
 - Online learning tools
 - LMS technologies
 - Data management
- Possible future entities served:
 - Local government
 - Large urban school districts
 - State organizations
 - 13-16 education?

Governance Model Workgroup

Objective

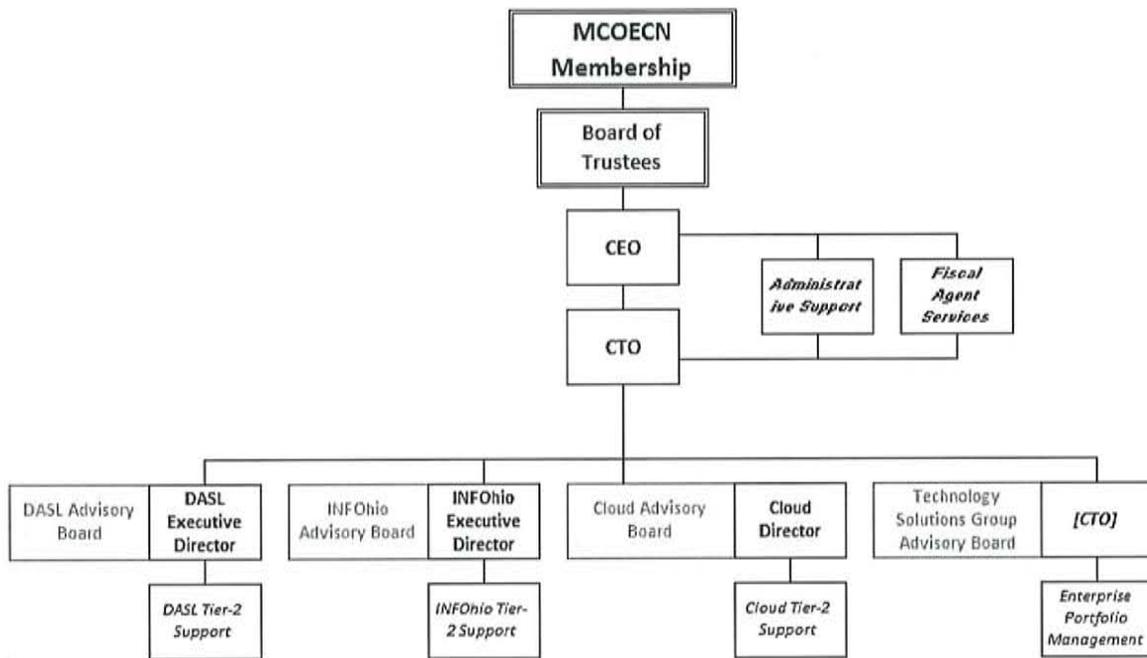
Determine who is responsible for designing, managing, and altering the processes that determine what technology assets are used, who can use them, who owns them, and how changes to the technology portfolio are made.

Working Assumptions

1. All current governance processes may be reconsidered
2. The anticipated governance model will be centralized and shared among the ITCs
3. ITCs will continue to be owned by their respective schools' districts and function as a COG or consortia

Summary

The governance model workgroup recommends that the cloud organization and operations be created as a project of the MC-OECN and use governance characteristics that are familiar to ITCs. The following is an example of how the MC-OECN cloud project fits within the existing governance approach.



Questions and Answers

What will be the governance model for the cloud organization (centralized, federated, etc.)?

The MC-OECN cloud will be a project similar to existing projects DASL, INFOhio, TSG, eSMOC and Kiosk. The governance model for the cloud will be based on a Cloud Advisory Board (CAB), which is elected by participating ITCs.

Characteristics of the cloud governance model:

- Simple and concise

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- Something that is familiar to ITCs:
- Is inclusive and participatory
- Has distributed decision making
- Each participating ITC or other approved entity has one vote
- Has long term flexibility to operate in (react to) the “real world”

What main roles will exist in the selected model?

- The Cloud Advisory Board, which reports to the MC-OECN CTO
- Cloud Director
- Purchasing Agent to approve all requisitions
- Fiscal Agent

The main roles are the Cloud Advisory Board and a shareholder board. CAB is composed of participating ITC defined as:

- Investor in the cloud business
- Owner/operator of the cloud business
- Reseller of the cloud services to Ohio K-12, local government and (maybe) for profit organizations
- Must be one of the existing MC-OECN members

Who will be the governing authority in managing and maintaining this model and any changes to it?

MC-OECN Board of Trustees is the final decision authority; there may be obvious conflicts of interest which require one or more board members to abstain from voting.

The Cloud Advisory Board will be created as the entity to initiate the cloud project. The CAB will manage and maintain the initial governance model in accordance with its by-laws. Board of Trustees approves all by-law changes.

How will technology ownership be determined in the new cloud organization?

The Cloud Advisory Board will be a project of the MC-OECN and technology ownership will be determined according to the by-laws of the CAB.

What function owns the technology assets?

Cloud technology asset ownership will be determined according to the by-laws of the Cloud Advisory Board.

What function manages and owns the enterprise technology portfolio and portfolio management?

Cloud technology portfolio and portfolio management responsibilities will be itemized in the by-laws of the Cloud Advisory Board.

How will service and product ownership be determined in the new cloud organization?

Cloud service and product ownership will be itemized in the by-laws of the Cloud Advisory Board.

How will demand management be handled? What group or function will authorize and budget for new services?

Demand for additional cloud capacity and new services will be determined by the Cloud Advisory Board. If appropriate, the MC-OECN CTO will present the proposals to the MC-OECN Board of Trustees for review and approval.

Will there be a standard service level agreement and reporting or unique SLAs for each ITC?

There will be various SLAs based on the cloud service level purchased and contracted for by each ITC on behalf of a customer.

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Local Government Innovation Fund Program

Application Scoring

Lead Applicant	SouthWest Ohio Computer Association
Project Name	SOUTHWEST CLOUD CENTER FEASIBILITY STUDY

<input checked="" type="checkbox"/>	Grant Application
-------------------------------------	--------------------------

or

<input type="checkbox"/>	Loan Application
--------------------------	-------------------------

The Local Government Innovation Fund Council
77 South High Street
P.O. Box 1001
Columbus, Ohio 43216-1001
(614) 995-2292

5-4-27

Local Government Innovation Fund Project Scoring Sheet

Section 1: Financing Measures

Financing Measures	Description	Criteria	Max Points	Applicant Self Score	Validated Score
Financial Information	Applicant includes financial information (i.e., service related operating budgets) for the most recent three years and the three year period following the project. The financial information must be directly related to the scope of the project and will be used as the cost basis for determining any savings resulting from the project.	Applicant provides a thorough, detailed and complete financial information	5	<input checked="" type="radio"/>	
		Applicant provided more than minimum requirements but did not provide additional justification or support	3	<input type="radio"/>	
		Applicant provided minimal financial information	1	<input type="radio"/>	
		Points		5	0
Repayment Structure (Loan Only)	Applicant demonstrates a viable repayment source to support loan award. Secondary source can be in the form of a debt reserve, bank participation, a guarantee from a local entity, or other collateral (i.e., emergency rainy day, or contingency fund, etc.).	Applicant clearly demonstrates a secondary repayment source.	5	<input type="radio"/>	
		Applicant does not have a secondary repayment source.	0	<input type="radio"/>	
		Points		0	0
Local Match	Percentage of local matching funds being contributed to the project. This may include in-kind contributions.	70% or greater	5	<input type="radio"/>	
		40-69.99%	3	<input checked="" type="radio"/>	
		10-39.99%	1	<input type="radio"/>	
		Points		3	0
Total Section Points				8	0

Section 2: Collaborative Measures

Collaborative Measures	Description	Criteria	Max Points	Applicant Self Score	Validated Score
Population	Applicant's population (or the population of the area(s) served) falls within one of the listed categories as determined by the U.S. Census Bureau. Population scoring will be determined by the smallest population listed in the application. Applications from (or collaborating with) small communities are preferred.	Applicant (or collaborative partner) is not a county and has a population of less than 20,000 residents	5	<input type="radio"/>	
		Applicant (or collaborative partner) is a county but has less than 235,000	5	<input type="radio"/>	
		Applicant (or collaborative partner) is not a county but has a population 20,001 or greater.	3	<input checked="" type="radio"/>	
		Applicant (or collaborative partner) is a county with a population of 235,001 residents or more	3	<input type="radio"/>	
		Points		3	0
Participating Entities	Applicant has executed partnership agreements outlining all collaborative partners and participation agreements and has resolutions of support. (Note: Sole applicants only need to provide a resolution of support from its governing entity.)	More than one applicant	5	<input checked="" type="radio"/>	
		Single applicant	1	<input type="radio"/>	
		Points		5	0
Total Section Points				8	0

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Local Government Innovation Fund Project Scoring Sheet

Section 3: Success Measures

Success Measures	Description	Criteria	Points	Applicant Self Score	Validated Score
Expected Return	Applicant demonstrates as a percentage of savings (i.e., actual savings, increased revenue, or cost avoidance) an expected return. The return must be derived from the applicant's cost basis. The expected return is ranked in one of the following percentage categories:	75% or greater	30	<input checked="" type="radio"/>	
		25.01% to 74.99%	20	<input type="radio"/>	
		Less than 25%	10	<input type="radio"/>	
		Points		30	0
Past Success	Applicant has successfully implemented, or is following project guidance from a shared services model, for an efficiency, shared service, coproduction or merger project in the past.	Yes	5	<input checked="" type="radio"/>	
		No	0	<input type="radio"/>	
		Points		5	0
Scalable/Replicable Proposal	Applicant's proposal can be replicated by other local governments or scaled for the inclusion of other local governments.	The project is both scalable and replicable	10	<input checked="" type="radio"/>	
		The project is either scalable or replicable	5	<input type="radio"/>	
		Does not apply	0	<input type="radio"/>	
		Points		10	0
Probability of Success	Applicant provides a documented need for the project and clearly outlines the likelihood of the need being met.	Provided	5	<input checked="" type="radio"/>	
		Not Provided	0	<input type="radio"/>	
		Points		5	0
Total Section Points				50	0

Section 4: Significance Measures

Significance Measures	Description	Criteria	Points Assigned	Applicant Self Score	Validated Score
Performance Audit Implementation /Cost Benchmarking	The project implements a single recommendation from a performance audit provided by the Auditor of State under Chapter 117 of the Ohio Revised Code or is informed by cost benchmarking.	Project implements a recommendation from an audit or is informed by benchmarking	5	<input checked="" type="radio"/>	
		Project does not implement a recommendation from an audit and is not informed by benchmarking	0	<input type="radio"/>	
		Points		5	0
Economic Impact	Applicant demonstrates the project will promote business environment (i.e., demonstrates a business relationship resulting from the project) and will provide for community attraction (i.e., cost avoidance with respect to taxes)	Applicant clearly demonstrates economic impact	5	<input checked="" type="radio"/>	
		Applicant mentions but does not prove economic impact	3	<input type="radio"/>	
		Applicant does not demonstrate an economic impact	0	<input type="radio"/>	
		Points		5	0
Response to Economic Demand	The project responds to current substantial changes in economic demand for local or regional government services.	Yes	5	<input checked="" type="radio"/>	
		No	0	<input type="radio"/>	
		Points		5	0
Total Section Points				15	0

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Section 5: Council Measures			
Council Measures	Description	Criteria	Points Assigned
Council Preference	Council Ranking for Competitive Rounds	The Applicant Does Not Fill Out This Section; This is for the Local Government Innovation Fund Council only. The points for this section is based on the applicant demonstrating innovation or inventiveness with the project	
Total Section Points (10 max)			

Scoring Summary			
		Applicant Self Score	Validated Score
Section 1: Financing Measures		8	0
Section 2: Collaborative Measures		8	0
Section 3: Success Measures		50	0
Section 4: Significance Measures		15	0
Total Base Points:		81	0

Reviewer Comments

5-4-30



April 2, 2012

Michael Crumley
Southwest Ohio Computer Association
3607 Hamilton Middletown Rd
Hamilton, Ohio 45011

RE: Application Cure Letter

Dear Michael Crumley:

The Ohio Department of Development (Development) has received and is currently reviewing your application for Round 1 of Local Government Innovation Fund program. During this review Development has determined that additional information is needed for your application. The identified item(s) requiring your attention are listed on the attached page(s). Please respond only to the issues raised. Failure to fully address all the identified items could lead to a competitive score reduction or ineligibility for Round 1 of the Local Government Innovation Fund program. **A written response from the applicant to this completeness review is due to Development no later than 5:00 p.m. on April 30, 2012.** Please send the response in a single email to lgif@development.ohio.gov and include "Cure—Project Name" in the subject line.

While this cure letter represents the additional information needed for Development review, the Local Government Innovation Council continues to reserve the right to request additional information about your application.

Thank you once again for your participation in Local Government Innovation program. Please contact the Office of Redevelopment at lgif@development.ohio.gov or 614-995-2292 if you have further questions regarding your application or the information requested in this letter.

Sincerely,

Thea J. Walsh, AICP
Deputy Chief, Office of Redevelopment
Ohio Department of Development

Local Government Innovation Fund Completeness Review

Applicant: Southwest Ohio Computer Association
Project Name: Southwest Ohio Computer Association Project
Request Type: Grant

Issues for Response

1. Budget

Please provide a line item budget that includes at minimum: 1) the sources of all funds being contributed to the project include **all** sources—cash, in-kind, etc.; 2) the uses of all funds (provide a line item for each use); 3) the total project costs (including the funding request **and** the local match. Please be sure that all uses of funds are eligible expenses as set forth in the program guidelines.

Example:
Collaboration Village's Project Budget

Sources of Funds	
LGIF Request	\$100,000
<u>Match Contribution (10%)</u>	<u>\$ 11,111</u>
Total	\$111,111

Uses of Funds	
<u>Consultant Fees for Study</u>	<u>\$111,111</u>
Total	\$111,111

Total Project Cost: \$111,111

2. Match

A minimum of 10% match is required for all projects. Matching funds must be 10% of the **total project cost** (not 10% of the funding request). Please document your 10% match and provide evidence of the contribution.

For **in-kind contributions**, please provide documentation as outlined in section 2.06 of the Local Government Innovation Fund program policies. Certification of in-kind contributions may only be made for past investments. Anticipated in-kind contributions must be certified **after** the contribution is made.

3. Financial Documentation

Financial history is required from all applicants. Please provide the most recent three years of financial history.

Please provide financial projections for your funding request. For grant requests, applicants must at minimum, estimate the anticipated savings they are expecting to realize as a result of the study. For loan projects, please provide projections for at least three years to help demonstrate the savings achieved and the repayment source for the loan.

4. Population Information and Documentation

Please provide documentation supporting population information provided using the 2010 U.S. Census. To access census information, you may visit the following website <http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml>.

5. Resolutions of Support

Resolutions of support must be provided by the governing body of the main applicant and each collaborative partner. If the collaborative partner is a private entity with no governing body, a letter of support **for the project** is required.

6. Partnership Agreements

Partnership agreements must be signed by all parties listed as collaborative partners. Please provide a partnership agreement that at minimum: 1) lists all collaborative partners; 2) lists the nature of the partnership; and 3) is signed by all parties. Please note, partnership agreements must be specific to the project for which funding is requested.



RESOLUTION

WHEREAS: The State of Ohio through HB 153 has created the Local Government Innovation Fund encouraging local governmental entities to promote efficiencies through collaboration and shared services and

WHEREAS: The Hamilton Clermont Cooperative Association has long been an advocate of shared services between and among school districts and

WHEREAS: The Hamilton Clermont Cooperative Association is interested in expanding its collaborative and shared services offerings with other Ohio Information Technology Centers, Ohio Schools, and other governmental entities in Ohio and

WHEREAS: The funds available through the Local Government Innovation Fund would be of great value in achieving these goals:

NOW, THEREFORE: The Executive Committee of The Hamilton Clermont Cooperative Association makes the following resolutions:

- 1.) The Hamilton Clermont Cooperative Association Executive Committee supports participation in the Local Government Innovation Fund
- 2.) The Executive Director is authorized to collaborate with other Information Technology Centers, Ohio Schools, and governmental entities in the preparation of one or more grant and/or loan applications through the Local Government Innovation Fund.
- 3.) The Hamilton Clermont Cooperative Association will appropriate, as recommended by the Executive Director, HCCA's fair share of the matching funds required under these applications.

Motion: Dave Distel

Second Julie Toth

Vote Ayes 6 Nays 0 Resolution 12.03.03

March 13, 2012



RESOLUTION

WHEREAS: The State of Ohio through HB 153 has created the Local Government Innovation Fund encouraging local governmental entities to promote efficiencies through collaboration and shared services and

WHEREAS: The Metropolitan Dayton Educational Cooperative Association (MDECA) has long been an advocate of shared services between and among school districts and

WHEREAS: The Metropolitan Dayton Educational Cooperative Association is interested in expanding its collaborative and shared services offerings with other Ohio Information Technology Centers, Ohio Schools, and other governmental entities in Ohio and

WHEREAS: The funds available through the Local Government Innovation Fund would be of great value in achieving these goals:

NOW, THEREFORE: The Board of Directors of The Metropolitan Dayton Educational Cooperative Association makes the following resolutions:

- 1.) The Metropolitan Dayton Educational Cooperative Association Executive Committee supports participation in the Local Government Innovation Fund.
- 2.) The Executive Director is authorized to collaborate with other Information Technology Centers, Ohio Schools, and governmental entities in the preparation of one or more grant and/or loan applications through the Local Government Innovation Fund including a joint Grant application in collaboration with several other Ohio Information Technology Centers to ascertain potential cost savings from a Cloud Computer Center.
- 3.) The Metropolitan Dayton Educational Cooperative Association will appropriate, as recommended by the Executive Director and approved by MDECA's Board of Directors, MDECA's fair share of the matching funds required under these applications.

Motion Frank DePalma

Second Mike Gray

Vote Ayes 7 Nays 0

Resolution #2012-03-04

March 21, 2012



SouthWest Ohio Computer Association

3607 Hamilton-Middletown Road ◇ Hamilton Ohio 45011-2241 ◇ voice 513.867.1028 ◇ fax 513.867.0754 ◇ www.swoca.net

April 30, 2012

Ms. Thea J. Walsh AICP
Deputy Chief, Office of Redevelopment
Ohio Department of Development

Dear Ms. Walsh:

The following documents are in response to your "cure letter" of April 2, 2012. Each element is in numerical order and labeled as in the letter.

In addition we have revised the page describing SWOCA that was submitted with information about one of the other partners in the original submission. Frankly, we had a "cut and paste" error.

Since the original submission, one of our partners, South Central Ohio Computer Association (SCOCA), withdrew because of other responsibilities. Consequently, the requested grant amount has been reduced to \$70,000.

Finally, I have enclosed Resolutions of Support from all partners except Western Ohio Computer Association. While they are in support of the project and have signed the partnership agreement, their quarterly meeting of the governing board is not until May 10. The resolution is on the agenda for that meeting.

Thank you for consideration of our application. We look forward to working with you.

Sincerely,

A handwritten signature in black ink, appearing to read "Michael Crumley", is written over a white background.

Michael Crumley
Executive Director, SWOCA

SOUTHWEST CLOUD COMPUTING CENTER FEASIBILITY STUDY

Submitted by

The SouthWest Ohio Computer Association

in collaboration with the following co-applicants

Hamilton/Clermont Cooperative Association

Metropolitan Dayton Educational Computer Association

Western Ohio Computer Association

Michael Crumley,

Executive Director, SouthWest Ohio Computer Association

March, 2012

(revised – April, 2012)

Southwest Ohio Computer Association

3607 Hamilton Middletown Rd.

Hamilton, OH 45011

513.867.1028

Fax – 513.867.0754

mike@swoca.net

www.swoca.net

Michael Crumley

Executive Director

The SouthWest Ohio Computer Association (SWOCA) is an Ohio Information Technology Center organized as a Council of Governments under the provisions of the Ohio Revised Code Chapter 167. SWOCA serves 34 districts and a student population of approximately 120,000. Headquarters for the agency are located in Hamilton, Ohio. The service area includes Butler, Warren, Preble, Hamilton and Clinton Counties.

This agency provides numerous shared services to its existing participating school districts. Among these services are financial software and support, student data management, electronic grade-book, Educational Management Information System (EMIS) support, the INFOhio library circulation system, Internet Access, Email, document storage and management, Voice Over Internet Protocol, and many other technical and program related services to Ohio schools and districts.

SWOCA is the lead applicant in the proposal with full access to the benefits of the cloud center if/when it is created. As is true for all of the partner sites, cost data from SWOCA will be included in the study. All of the services currently provided in the regional centers will be evaluated for possible migration to the Cloud center. The determining factor for each service will be cost effective delivery to the end users.

The executed collaborative agreement and supporting resolution from the SWOCA governing board will be provided by April 30, 2012.

1. Budget

Please provide a line item budget that includes at minimum: 1) the sources of all funds being contributed to the project include all sources-cash, in-kind, etc.; 2) the uses of all funds (provide a line item for each use); 3) the total project costs (including the funding request and the local match. Please be sure that all uses of funds are eligible expenses as set forth in the program guidelines.

2. Match

A minimum of 10% match is required for all projects. Matching funds must be 10% of the total project cost (not 10% of the funding request). Please document your 10% match and provide evidence of the contribution.

For in-kind contributions, please provide documentation as outlined in section 2.06 of the Local Government Innovation Fund program policies. Certification of in-kind contributions may only be made for past investments. Anticipated in-kind contributions must be certified after the contribution is made.

SouthWest Cloud Computing Center Feasibility Study

Project Budget and local match

4/30/12

Source of Funds

LGIF Request	\$	70,000.00
Local Match from participating entities	\$	8,000.00
<hr/>		
Total Revenue:	\$	78,000.00

Uses of Funds

Consultant Fees for Study

Business Analyst 400 hrs. @ \$125.00 per hr.

Project Mgr. 88 hrs @ 125.00 per hr.

Subject Matter Experts 50 hrs. @ \$200.00
per hr.

Travel & Expenses 4 trips @ \$1,000 per trip

Total Consultant fees	\$	75,000.00
Administration, Travel, Supplies	\$	3,000.00
	\$	78,000.00
Anticipated in-kind contributions	\$	8,000.00

3. Financial Documentation

Financial history is required from all applicants. Please provide the most recent three years of financial history.

Hamilton/Clermont County Information Technology Center (HCCA)			
Combined Financial Report - All Funds			
	<u>FY2009</u>	<u>FY2010</u>	<u>FY2011</u>
Beginning Cash Balance (July 1)	\$ 2,137,921.98	\$ 2,155,352.39	\$ 2,722,136.98
Revenue:			
Local			
State			
Federal			
Total Revenue	\$ 5,008,993.99	\$ 5,679,001.27	\$ 5,759,719.12
Expenditures:			
Wages 1XX	\$ 1,872,983.49	\$ 1,959,552.36	\$ 1,975,580.60
Fringes 2XX	\$ 589,526.29	\$ 587,051.68	\$ 610,043.29
Purchased Services 4XX	\$ 1,078,777.32	\$ 1,248,859.70	\$ 1,158,629.06
Materials/Supplies 5XX	\$ 793,449.75	\$ 967,610.60	\$ 976,256.59
Capital Outlay 6XX	\$ 321,417.26	\$ 295,195.70	\$ 903,476.70
Other Operational 8XX & 9XX	\$ 335,409.47	\$ 53,946.64	\$ 57,171.79
Total Expenditures	\$ 4,991,563.58	\$ 5,112,216.68	\$ 5,681,158.03
Ending Cash Balance (June 30)	\$ 2,155,352.39	\$ 2,722,136.98	\$ 2,800,698.07

Metropolitan Dayton Educational Cooperative Association (MDECA)			
Combined Financial Report - All Funds			
	<u>FY2009</u>	<u>FY2010</u>	<u>FY2011</u>
Beginning Cash Balance (July 1)	\$ 2,695,369.38	\$ 2,593,625.51	\$ 2,266,263.39
Revenue:			
Local	\$ 1,852,419.94	\$ 1,922,391.46	\$ 2,031,931.26
State	\$ 632,815.87	\$ 556,469.64	\$ 498,817.20
Federal	\$ -	\$ -	\$ -
Total Revenue	\$ 2,485,235.81	\$ 2,478,861.10	\$ 2,530,748.46
Expenditures:			
Wages 1XX	\$ 1,214,772.76	\$ 1,278,460.49	\$ 1,330,846.52
Fringes 2XX	\$ 390,482.56	\$ 395,558.10	\$ 423,155.51
Purchased Services 4XX	\$ 861,577.32	\$ 936,276.95	\$ 526,202.89
Materials/Supplies 5XX	\$ 25,352.32	\$ 36,203.09	\$ 305,158.56
Capital Outlay 6XX	\$ 73,153.32	\$ 131,344.80	\$ 136,444.01
Other Operational 8XX	\$ 21,641.40	\$ 28,379.79	\$ 21,594.64
Transfers Out	\$ -	\$ -	\$ -
Miscellaneous	\$ -	\$ -	\$ -
Total Expenditures	\$ 2,586,979.68	\$ 2,806,223.22	\$ 2,743,402.13
Ending Cash Balance (June 30)	\$ 2,593,625.51	\$ 2,266,263.39	\$ 2,053,609.72

SouthWest Ohio Computer Association
 Council of Governments
 Combined Financial Report-All Funds

	FY 09	FY10	FY11
Beginning Cash Balance on July 1	\$ 3,482,726.70	\$ 3,605,882.35	\$ 3,556,047.68
Revenue			
Local	2,643,643.29	2,853,659.91	3,443,442.44
State	698,256.34	619,844.71	556,926.50
Federal	556,601.09	495,987.65	533,152.87
Total Revenue	<u>\$ 3,898,500.72</u>	<u>\$ 3,969,492.27</u>	<u>\$ 4,533,521.81</u>
Expenditures			
Wages 1xx	1,168,805.19	1,312,862.41	1,447,637.13
Fringes 2xx	395,434.46	427,451.09	500,419.53
Purchased Services 4xx	845,461.09	839,037.99	928,760.35
Materials/Supplies 5xx	813,175.73	1,003,113.11	796,083.64
Capital Outlay 6xx	224,121.79	396,657.16	326,061.72
Other Operational Expenditures 8xx (membership fees; legal; etc.)	23,953.66	34,451.32	25,907.12
Transfers Out	277,673.91		208,581.55
Misc.	26,719.24	5753.86	
Total Expenditures	<u>\$ 3,775,345.07</u>	<u>\$ 4,019,326.94</u>	<u>\$ 4,233,451.04</u>
Fund Balance as of June 30	<u><u>\$ 3,605,882.35</u></u>	<u><u>\$ 3,556,047.68</u></u>	<u><u>\$ 3,856,118.45</u></u>

Western Ohio Computer Association

	FY09	FY10	FY11
BEGIN CASH BALANCE JULY	\$ 397,023.71	\$ 503,347.03	\$ 686,164.06
REVENUE:	\$ 2,455,250.57	\$ 2,515,354.57	\$ 2,568,066.98
LOCAL			
STATE			
FEDERAL			
EXPENDITURES:			
WAGES			
FRINGES			
PURCHASED SERVICES			
SUPPLIES			
CAPITAL OUTLAY			
OTHER OPER EXP			
TRANSFERS OUT			
MISC			
TOTAL EXPENDITURES	\$ 2,348,927.25	\$ 2,332,537.54	\$ 2,442,842.10
FUND BALANCE AS OF JUNE	\$ 503,347.03	\$ 686,164.06	\$ 811,388.94

Please provide financial projections for your funding request. For grant requests, applicants must at minimum, estimate the anticipated savings they are expecting to realize as a result of the study.

“Anticipated Savings” are very difficult with our proposal because the entire project is intended to support the proposition that there will be savings in the “Cloud Concept” for ITCs. To some it seems pure logic that consolidating resources MUST save money. Others argue that the amount of potential savings does not justify the considerable migration cost. So, we really don’t know if the savings will be 5% or 35% of the operating budgets. Our intent is to find out.

4. Population Information and Documentation

Please provide documentation supporting population information provided using the 2010 U.S. Census.

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Please provide documentation supporting population information provided using the 2010

U.S. Census. To access census information, you may visit the following website <http://factfinder2.census.gov/faces/nav!isf/pages/index.xhtml>.

SITE	B01003: TOTAL POPULATION - Universe: Total population 2006-2010 American Community Survey 5-Year Estimates
WOCO	Auglaize County, Ohio 46,023
SWOCA	Butler County, Ohio 363,465
WOCO	Champaign County, Ohio 40,140
H/CCA	Clermont County, Ohio 195,312
MDECA	Darke County, Ohio 52,945
WOCO	Hardin County, Ohio 32,104
H/CCA	Hamilton County, Ohio 802,194
WOCO	Logan County, Ohio 46,006
MDECA	Miami County, Ohio 102,315
MDECA	Montgomery County, Ohio 538,461
SWOCA	Preble County, Ohio 42,502
WOCO	Shelby County, Ohio 49,350
SWOCA	Warren County, Ohio 207,790
Grand Total	2,550,711

"Source: U.S. Census Bureau, 2006-2010 American Community Survey

5. Resolutions of Support

Resolutions of support must be provided by the governing body of the main applicant and each collaborative partner.



RESOLUTION

WHEREAS: The State of Ohio through HB 153 has created the Local Government Innovation Fund encouraging local governmental entities to promote efficiencies through collaboration and shared services and

WHEREAS: The Hamilton Clermont Cooperative Association has long been an advocate of shared services between and among school districts and

WHEREAS: The Hamilton Clermont Cooperative Association is interested in expanding its collaborative and shared services offerings with other Ohio Information Technology Centers, Ohio Schools, and other governmental entities in Ohio and

WHEREAS: The funds available through the Local Government Innovation Fund would be of great value in achieving these goals:

NOW, THEREFORE: The Executive Committee of The Hamilton Clermont Cooperative Association makes the following resolutions:

- 1.) The Hamilton Clermont Cooperative Association Executive Committee supports participation in the Local Government Innovation Fund
- 2.) The Executive Director is authorized to collaborate with other Information Technology Centers, Ohio Schools, and governmental entities in the preparation of one or more grant and/or loan applications through the Local Government Innovation Fund.
- 3.) The Hamilton Clermont Cooperative Association will appropriate, as recommended by the Executive Director, HCCA's fair share of the matching funds required under these applications.

Motion: Dave Distel

Second Julie Toth

Vote Ayes 6 Nays 0 Resolution 12.03.03

March 13, 2012



RESOLUTION

WHEREAS: The State of Ohio through HB 153 has created the Local Government Innovation Fund encouraging local governmental entities to promote efficiencies through collaboration and shared services and

WHEREAS: The Metropolitan Dayton Educational Cooperative Association (MDECA) has long been an advocate of shared services between and among school districts and

WHEREAS: The Metropolitan Dayton Educational Cooperative Association is interested in expanding its collaborative and shared services offerings with other Ohio Information Technology Centers, Ohio Schools, and other governmental entities in Ohio and

WHEREAS: The funds available through the Local Government Innovation Fund would be of great value in achieving these goals:

NOW, THEREFORE: The Board of Directors of The Metropolitan Dayton Educational Cooperative Association makes the following resolutions:

- 1.) The Metropolitan Dayton Educational Cooperative Association Executive Committee supports participation in the Local Government Innovation Fund.
- 2.) The Executive Director is authorized to collaborate with other Information Technology Centers, Ohio Schools, and governmental entities in the preparation of one or more grant and/or loan applications through the Local Government Innovation Fund including a joint Grant application in collaboration with several other Ohio Information Technology Centers to ascertain potential cost savings from a Cloud Computer Center.
- 3.) The Metropolitan Dayton Educational Cooperative Association will appropriate, as recommended by the Executive Director and approved by MDECA's Board of Directors, MDECA's fair share of the matching funds required under these applications.

Motion Frank DePalma

Second Mike Gray

Vote Ayes 7 Nays 0

Resolution #2012-03-04

March 21, 2012



RESOLUTION

WHEREAS: The State of Ohio through HB 153 has created the Local Government Innovation Fund encouraging local governmental entities to promote efficiencies through collaboration and shared services and

WHEREAS: The SouthWest Ohio Computer Association Council has long been an advocate of shared services between and among school districts and

WHEREAS: The SouthWest Ohio Computer Association Council is interested in expanding its collaborative and shared services offerings with other Ohio Information Technology Centers, Ohio Schools, and other governmental entities in Ohio and

WHEREAS: The funds available through the Local Government Innovation Fund would be of great value in achieving these goals:

NOW, THEREFORE: The Executive Committee of The SouthWest Ohio Computer Association Council makes the following resolutions:

- 1.) The SouthWest Ohio Computer Association Council Executive Committee supports participation in the Local Government Innovation Fund.
- 2.) The Executive Director is authorized to collaborate with other Information Technology Centers, Ohio Schools, and governmental entities in the preparation of one or more grant and/or loan applications through the Local Government Innovation Fund including a joint Grant application in collaboration with several other Ohio Information Technology Centers to ascertain potential cost savings from a Cloud Computer Center.
- 3.) The SouthWest Ohio Computer Association Council will appropriate, as recommended by the Executive Director, SWOCA's fair share of the matching funds required under these applications.

Motion ___William Derringer___

Second _____Ed Pokora_____

Vote Ayes ___6___ Nays _____ Resolution ___Passed___

January 26, 2012

6. Partnership Agreements

Partnership agreements must be signed by all parties listed as collaborative partners. Please provide a partnership agreement that at minimum:

- 1} lists all collaborative partners;
- 2} lists the nature of the partnership; and 3) is signed by all parties. Please note, partnership agreements must be specific to the project for which funding is requested.

**Partnership Agreement
For
The SouthWest Ohio Cloud Computing Center Feasibility Study**

The Ohio Information Technology Centers (ITCs) named below have entered into a collaborative partnership. The purpose of this partnership is to conduct a feasibility study into the potential savings to be realized through the creation of Cloud Centers combining the services of multiple ITCs.

The partners in this venture are as follows:

Hamilton/Clermont Cooperative Association
7615 Harrison Ave.
Cincinnati, OH 45231

Metropolitan Dayton Educational Cooperative Association
225 Linwood St.
Dayton, OH 45405

Southwest Ohio Computer Association
3607 Hamilton Middletown Rd.
Hamilton, OH 45011

Western Ohio Computer Association
129 East Court St.
Sidney, OH 45365

The nature of this partnership is limited to the application for a grant through the Ohio Local Government Initiative Fund (LGIF) and the implementation of the study described in the grant application. While it is possible that the partners may pursue future collaboration as a result of the study, no commitment is made at this time.

April 25, 2012

Signatures:



Al Porter, Executive Director, H/CCA



Jerry Woodyard, Executive Director, MDECA



Michael Crumley, Executive Director, SWOCA



Donn Walls, Executive Director, WOCO