Board of County Commissioners
Agenda Request

Aitkin County

4A
Agenda Item #

Requested Meeting Date: Oct. 11, 2016

Title of Item: MCIS Hosting Agreement

	Action Requested:			Direction Requested
☑ REGULAR AGENDA	☑ Approve/Deny Motion		☐	Discussion Item
☐ CONSENT AGENDA	☐ Adopt Resolution (attach draft)		☐	Hold Public Hearing*
☐ INFORMATION ONLY				*provide copy of hearing notice that was published

Submitted by:	Department:
Steve Bennett	IT

Presenter (Name and Title):	Estimated Time Needed:
Steve Bennett - IT Director & Kirk Peysar - Auditor	10 minutes

Summary of Issue:

The County owns and maintains an IBM iSeries server, primarily for the support of IFS, Payroll, Tax and Property systems. Said server is due to be replaced in 2018. The 10-year IT capital budget has this item listed at $35,000.00. Our in-house iSeries specialist retired last year and expertise in this field is expected to remain difficult to impossible to find, making operating this server increasingly difficult. Most of the MCIS counties are in similar circumstances.

Our joint powers entity MCIS (11 mostly NE MN counties) has proposed a hosting solution for their membership. MCIS currently provides programming and applications for our iSeries functions. As such they have the required staff and skill sets to provide the support needed to maintain this platform. As currently proposed, MCIS will host an iSeries server(s), provide hardware and software support, and manage its operations. County users would continue to access the iSeries from their office workstations. Aitkin County is looking to late 2017/early 2018 to move to this scenario.

Attached is the Hosting Agreement from MCIS. It details some of the assumptions and gives cost estimates. I am requesting this agreement be signed so planning and implementation of the host environment can proceed.

Alternatives, Options, Effects on Others/Comments:

Recommended Action/Motion:

Sign agreement with MCIS

Financial Impact:

Is there a cost associated with this request? ☑ Yes   ☐ No

What is the total cost, with tax and shipping? $

Is this budgeted? ☑ Yes   ☐ No   *Please Explain:*

It will be a budgeted item in the years of implementation.

Legally binding agreements must have County Attorney approval prior to submission.

MINNESOTA COUNTIES INFORMATION SYSTEMS

HOSTING AGREEMENT

This Hosting Agreement is made by and between **Minnesota Counties Information Systems** (MCIS), a Minnesota joint powers entity, and **Aitkin County**, a Minnesota political subdivision (the Hosted Entity).

Recitals

A. The Hosted Entity is a Member or Associate Member of the MCIS joint powers entity, as defined by the MCIS Joint and Cooperative Agreement.

B. The Hosted Entity owns and operates IBM iSeries (f/k/a AS/400) computer systems on which the Hosted Entity runs various software programs related to the Hosted Entity's statutory functions.

C. The iSeries systems require support staff with sufficient expertise in both the software and the IBM hardware to properly support the systems.

D. Due to personnel changes over time, it has become more difficult for political subdivisions to maintain adequate staff expertise for the IBM iSeries systems.

E. As a solution to the personnel issues, MCIS offers a hosted environment whereby MCIS acquires and maintains the requisite IBM hardware in a suitable location and hosts the software and data needed by the political subdivisions.

F. This Hosting Agreement sets forth the terms and conditions of the hosting relationship between MCIS and the Hosted Entity.

Terms

1. **DEFINITIONS.**

   a. Budget Year. The MCIS Budget Year is January 1st through December 31st. The budget process typically starts February; the budget approved by the MCIS Board in July; and final acceptance by the members on or before September 1st in the current year.

   b. Planned Date. The date the Hosted Entity plans to be implemented on the hosted environment. Upon signing, the Hosted Entity will provide to MCIS the year they plan to move to the hosted server.

   c. Implementation or Implementation Date. The month and year the Hosted Entity is cutover from their existing server to the hosted server for production purposes. The implementation schedule will be defined during the planned year's budget process.

   d. Replacement Year. The year the hardware is expected to be replaced or substantially upgraded. For this Agreement, the Replacement Year is 2022.

2. **EFFECTIVE DATE.** This Hosting Agreement is effective upon signing.

3. **HOSTING SERVICES.**

   a. MCIS will provide hosting servers and all necessary ancillary equipment, backup tapes, support and maintenance to host the Hosted Entity's iSeries applications and data ("the Services"). MCIS will provide the processor capacity, disk space and memory to run the Hosted Entity's iSeries applications.

The specifications of the hardware used for hosted services shall be determined by MCIS in its sole discretion.

b. The host server(s) will be located in a data center with 24-hour security, redundant power, cooling and broadband connectivity.

c. MCIS is responsible for applying PTF and microcode updates as needed.

d. MCIS will perform daily backups to a disk-based backup system with replication of the daily backups to secondary site. Weekly, monthly and yearly backup tapes will be provided and stored in a secure, off-site location.

e. The Hosted Entity is responsible for providing all equipment and/or software necessary at the Hosted Entity's place of business for the Hosted Entity to access the hardware and systems provided by MCIS and for maintaining applicable software licensing.

4. **HOSTING FEES.**

The Buy-in and Reserve fees are the Hosted Entity's commitment to MCIS of their desire to move to the hosted environment on the Planned Date. The Hosted Entity, through the signing of this agreement, commits to these fees as outlined below up to, but not including, the Replacement Year.

a. Buy-in Fee. The Hosted Entity shall pay a one-time Buy-in Fee to offset the initial equipment purchase cost. This fee will be included on the invoice created to collect past due reserve fees. .

b. Reserve Fee. This fee is used to build up a fund for the replacement of the hosting hardware/software. The Hosted Entity is responsible to pay this fee starting January 1, 2017, and ending the replacement year. This fee will be invoiced as follows:

    i. Past due reserve fees will be invoiced at implementation, and includes the total amount from January 1, 2017 through the end of the last quarter billed in the current calendar.

    ii. Thereafter, invoice are sent quarterly for the next three months of reserve fees due.

    iii. In the Replacement Year, if the amount in the Reserve Fees fund does not cover the purchase price of the replacement equipment, MCIS reserves the right to charge an extra fee during the next budget cycle as approved by the MCIS Board.

    iv. MCIS Board will set and approve a new Reserve Fee during the Replacement Year budget cycle.

c. Maintenance Fee. The Hosted Entity shall pay a pro-rata share of the hardware and software maintenance costs, related supplies and facility charges for the iSeries equipment. The monthly fee is determined as part of the MCIS annual budget approval process. This fee starts January of the Planned Date year and is billed as follows:

    i. If the Hosted Entity's implementation of hosted services occurs after January 1 of the Planned Date year, then fees for prior months of that calendar year through the end of the quarter in which implementation occurred will be billed.

    ii. Thereafter, on a quarterly basis the hosted entity will be invoiced for the next three months of maintenance fees due.

d. The Reserve and Maintenance fees can be discontinued during the Replacement Year's MCIS Budget approval process at MCIS's sole discretion.

e. Service Fee. The Hosted Entity shall determine the Level of Service to be provided by MCIS during the yearly budgeting process (reference Exhibit 3 for Levels of Service), and each level's monthly fee is set by the MCIS Board during the annual budget process. The Hosted Entity can increase a service level, but cannot move to a lower service level once the MCIS Budget is approved. Fee is payable as follows:

  i. All fees are based on a "calculation date" which is the earlier of the planned date or actual implementation date,

  ii. The first invoice occurs upon implementation and consists of: a one-time start-up fee based on two months of the current year's Level 1 monthly fee; and the number of months from the calculation date through the ending month of the last quarter MCIS has invoiced for multiplied by the selected level monthly service fee.

  iii. Thereafter, on a quarterly basis the hosted entity will be invoiced for the next three months multiplied by the selected level monthly service fee.

f. If amounts owed by the Hosted Entity become past due, the Hosted Entity is subject to the penalties and restrictions set forth in the Joint Powers Agreement.

g. *Refer to Exhibit 1 for amounts associated with each fee and Exhibit 2 for an invoicing example.*

5. **SECURITY REQUIREMENTS.** It is of paramount importance that the Hosted Entity's data on the MCIS iSeries equipment is secure. It is **strongly recommended** that the Hosted Entity's security on its own iSeries equipment be at "Security Level 30 or 40" at minimum prior to MCIS providing hosting services under this Agreement. Details on achieving Level 30 or 40 security are found in the MCIS AS/400 Security Manual and in Exhibit 4 (MCIS Security Level 30 or 40 Defined).

   Notwithstanding any other term or agreement to the contrary, in the event the Hosted Entity's iSeries equipment security level is not at Security Level 30 or above prior to transferring data and programs into the hosted environment, then to the extent such data and programs remain below Security Level 30, the Hosted Entity is solely liable for any and all data breaches that occur within the hosted environment and agrees to defend and indemnify MCIS from any claims arising from such data breaches.

6. **TERM.**

   a. This Agreement commences on the Effective Date and extends through the Replacement Year. The Termination Date can be revised by the MCIS Board as it deems necessary.

   b. Any party may terminate this Agreement without cause upon 180 days written notice to the other parties. In addition, this Agreement may be terminated if a party provides written notice of a breach of this Agreement and the breaching party fails to cure the breach within 60 days after receipt of the notice. If the Hosted Entity is the breaching party, it remains responsible for the Service Fee for the remainder of the budget year, and for the Reserve and Maintenance Fees through the Termination Date.

   c. If the Hosted Entity terminates this Agreement without cause within 30 days after MCIS approves its annual budget in July, the Hosted Entity is not responsible for the Service Fee for that budget year. If the Agreement is not terminated within that 30 day period, the Hosted Entity remains responsible for the Service Fees for the entire budget year regardless of the termination date. If the Hosted Entity

terminates this Agreement without cause prior to the Termination Date, the Hosted Entity remains responsible for payment of the Reserve and Maintenance Fees through the Termination Date. The Hosted Entity acknowledges that the financial structure of the MCIS hosting service depends on guaranteed receipt of Reserve and Maintenance Fees from hosted entities during the entire term of the hosted agreements. This clause shall survive termination of this Agreement.

7. **INDEMNIFICATION AND LIMITATION OF LIABILITY.**

   a. MCIS and the Hosted Entity shall fully defend and indemnify and hold harmless the other party against all claims, losses, liability, suits, judgments, costs and expenses by reason of action or inaction of the employees or agents of the indemnifying party arising in whole or in part from any act or omission of the indemnifying party, its subcontractors, and their agents, servants, or employees, incidental to the performance of this Agreement. This agreement to indemnify and hold harmless does not constitute a waiver by any party of limitations on liability under Minnesota Statutes Section 466.04 and other applicable law or rule.

   b. To the full extent permitted by law, actions by the Parties pursuant to this Agreement are intended to be and shall be construed as a "cooperative activity" and it is the intent of the Parties that they shall be deemed a "single governmental unit" for the purposes of liability, all as set forth in Minnesota Statutes Section 471.59 subdivision 1a(a); provided further that for the purposes of this statute, each party to this Agreement expressly declines responsibility for the acts or omissions of the other Party.

   c. The parties to this Agreement are not liable for the acts or omissions of the other Party to this Agreement except to the extent to which they have agreed in writing to be responsible for acts or omissions of the other Party.

8. **REPRESENTATIONS AND WARRANTIES.** Each party represents and warrants that the execution and performance of this Agreement has been duly authorized and the signatory to this Agreement possesses all necessary authority to enter into the Agreement.

9. **DATA PRACTICES.**

   a. All data created, collected, received, stored, used or maintained on the MCIS equipment and on or through the associated Hosted Entity network equipment is subject to the requirements of the Minnesota Government Data Practices Act (MGDPA). All parties shall abide by the provisions of the MGDPA, the Health Insurance Portability and Accountability Act and implementing regulations, and all other applicable state and federal laws relating to data privacy.

   b. The parties hereto acknowledge that MCIS is only providing a hosting environment for the Hosted Entity's data. Data content is the sole responsibility of the Hosted Entity. All data requests under the MGDPA are to be responded to by the Hosted Entity as the responsible authority for the data. Any requests for data, or for changes, additions or deletions to data, received by MCIS from a third party shall be forwarded to the Hosted Entity for response.

   c. The Hosted Entity shall annually provide MCIS with an authorization to access the data for the sole purpose of carrying out its hosting obligations under this Agreement.

10. **RELATIONSHIP.** This Agreement does not create a partnership, joint venture or other business combination between the parties. Each party is responsible for its own insurance.

11. **FORCE MAJEURE.** No party shall be in breach of this Agreement in the event they are unable to perform their obligations as a result of natural disaster, war, emergency conditions, labor strife, the substantial inoperability of the Internet, the substantial inoperability of the State's WAN, or other reasons beyond their reasonable control, provided, however, that if such reasons or conditions remain in effect for a period of more than 30 days, any party may terminate this Agreement without further liability to that party.

12. **NOTICE.** Any notices required or permitted to be given under this Agreement shall be in writing, signed on behalf of the party providing notice, and deemed received (1) upon receipt if personally delivered; (2) on third day after mailing if sent by certified mail, return receipt requested; or (3) the next business day if sent by messenger or reputable overnight courier. Notices shall be sent to the following addresses:

Executive Director
Minnesota Counties Information Systems
413 S.E. 7th Ave.
Grand Rapids, MN 55744

IT Director
Aitkin County
209 Second St NW Room 118
Aitkin, MN 56431

13. **ASSIGNMENT.** No party shall assign its rights or delegate its duties under this Agreement without receiving prior written consent of the other parties.

14. **WAIVER.** The waiver of any provision or the breach of any provision of this Agreement shall not be effective unless made in writing. Any waiver by either party of any provision or the breach of any provision of this Agreement shall not operate as, or be construed to be, a continuing waiver of the provision or the breach of the provision.

15. **EXECUTION.** This Agreement may be executed in one or more counterparts, each of which shall be deemed an original and to constitute one and the same instrument. Electronic copies shall be considered originals.

16. **MISCELLANEOUS.** This Agreement constitutes the entire agreement between the parties with respect to the subject matter hereof and supersedes all prior and contemporaneous agreements, documents and proposals. Any amendment or modification to this Agreement shall not be valid unless such amendment or modification is in writing, signed by authorized representatives, and references this Agreement. Any and all causes of action between any party arising out of or related to this Agreement shall be venued in Itasca County District Court.

Minnesota Counties Information Systems

By: _____

Printed Name: Lyle Eidelbes

Its: MCIS Executive Director

Dated: _____

County of Aitkin

By: _____

_____
Print Name

Its:_____

Dated: _____

By: _____

_____
Print Name

Its:_____

Dated: _____

EXHIBIT 1 – HOSTING FEES

	Yearly Amount	Invoice Amount	Frequency
Buy-in [1,2]	$21,400	$21,400	One-Time
Reserve [1]	$4,640	$1,160	Quarterly

1. Buy-in and Reserve fees were set with the assumption that a specific number of Counties would be moving to hosting anytime between 9/1/2016 and 12/31/2021. Based on the total signed contracts received during initial sign-up a one-time increase or decrease adjustment of these amounts may be required.

2. The Buy-in Fee is anticipated to range from $18,500 - $24,000, and is dependent on number of counties, IBM holding on the 18% discount, and IBM allowing MCIS to transfer licenses and processors from other members' machines.

The following chart is an ESTIMATE of Maintenance and Service fees by year through 2021. These amounts are subject to change on yearly basis based on number of participants and increases/decreases in maintenance and service expenses. The MCIS Board will approve these fees as the part of the yearly budgeting process

	2017	2018	2019	2020	2021
Maintenance	$1,730	$1,830	$4,060	$4,210	$4,360
Level 1	$4,440	$4,560	$4,680	$4,920	$4,920
Level 2	$7,680	$7,800	$8,040	$8,400	$8,520
Level 3	$9,000	$9,120	$9,480	$9,840	$9,960

EXHIBIT 2 – HOSTING INVOICE EXAMPLE

An example of the first and subsequent invoice would be based on the following assumptions:

Assumptions:
- Planned Date set at June 2018
- Actual Live Date was May 1st, 2018
- Buy-in Fee - $21,300
- Reserve Fees – $1,160/quarter
- Maintenance Fees – $432.50/quarter
- Selected Level 2 Support Fees - $1,920/quarter ($640/month or $7,680/year)
- Level 1 Support – $1,110/quarter (approx. $370/month)

- First Invoice – deals with getting prior quarters through 6/30/2018 up to date.
  - Invoice created 6/1/2018
  - Buy-in Fee $21,400
  - Reserve Fee $ 6,960
    - Total number of quarters to bill is six (6) @ $1,160/quarter
  - Maintenance Fee $ 865
    - Total number of quarter to bill is two (2) @ $432.50/quarter
  - Support Level 2 Fee $ 2,060
    - 2 months at Level 1 – Total $740 (2 @ $370, which is set up fee)
    - 1 month at Level 2 – Total $1,280 (2 @ $640)
  - Total Invoice $33,305

- Next Invoice being sent 6/15/2018 for 3rd quarter 2018
  - Reserve Fees $1,160.00
  - Maintenance Fee $ 432.50
  - Support Level Fee $1,920.00
  - Total Invoice $3,512.50

EXHIBIT 3 – LEVELS OF SERVICE

1. <u>**Level 1 – Basic Support (Required)**</u>

Focus is on the hosting environment, such as hardware, Power I (i-Series) operating system and IBM stand applications, backups, recover, and equipment/software associated with the backup, monitoring, and recovery.   Following are the activities:

Start-up
Perform due diligence with County to determine specific roles/responsibilities
Coordinate set up of LPARs, network connectivity
Coordinate test cycle and user performance measurements
Provide a checklist of startup events.

Disaster / Recovery
Daily Tasks

Review Backup Logs / Resolve issues as needed	Daily
Monitor Cybernetics backup and replication to Carlton of Daily and two week rotations	Daily

Periodic Tasks

Setup / Refine Backup schedules	
Weekly backups to tape (5 week rotation)	Monday or first business day of week
Monthly (15 month rotation)	After month end backups
Yearly (10 years minimum)	After year-end backups
Move media (tapes) to off-site location	
Restore Specific Objects	As needed and per request through Help Desk

Disaster / Recovery Test

Maintain DRS plan for i-Series	
Incorporate hosting plan to county specific plan	Yearly Review
Testing to recover hosted i-Series - Hosting Env Perspective	Not concern with connectivity back to County. Concerned with backups can recover partitions and host controller Est doing every 2 years

Hosting Equipment / Software - Monitoring, Planning & Upgrading
Power-I Hardware
Cybernetics Hardware
Tape Drive Hardware
Hardware Mgmt. Console
Coordinate connectivity issues with Itasca County

Power-I Operating System & IBM Licensed Code -
PTF, Tech Refresh, Releases
    Operational Related Tools - backups, alert, anti-virus
    Coordinate network issues resolution with Itasca
    Monitor hardware/software alert global to all partitions

Application Software
    For MCIS Software, copy executable to i-Series IFS
    folder in order for County to install

2. **Level 2 – includes Level 1 plus MCIS Software**
    Focus on controlling software and utilities utilized with MCIS developed software.

Application Software

Apply Property Tax and Payroll Updates/Releases	
Apply MCIS Utility software updates/patches	FormSprint (base, PDF/Email), Presto, Zend, DBU, MQGPL, Apache
Run MIS tasks for Property Tax & Payroll jobs	Jobs that can be scheduled will be, all other will be done on action requested by product owner.
Monitor i-Series IFS folders as it relates to MCIS Software	

User Provisioning

Set up, change, terminate user profile, clean up objects owned	
Monitors/Manages i-Series to maintain "true" level 30/40 security	Assumes County at "True" Level 30/40 prior to hosting.
Set up user to get to main menu upon sign-on and direct to application authorized to.	Assumes County handling specific application authority and setup within applications, except as noted. Need County using MCIS menu system for users initial sign on menu.
Provide user security setup within Property Tax / Payroll	If product owner relinquish duties, then MCIS will still seek approval from product owners before making additions/changes
Provide assistance on basic audit information requests	Examples of basics: list of users on system, setting of system values, setting up access for the auditor to review system.

System management

Monitor/Manage message queues (QSYSOPR), logs, and/or Journals which are part of MCIS software and/or IBM Licensed programs	Coordinate Payroll/ Tax Software issues directly with MCIS. Alert Member County on other software.
Monitor/Manage print queues, virtual queues, printers, job queues, disabled sessions/profiles,	Coordinate Payroll/ Tax Software issues directly with MCIS. Alert Member County on other software.
Monitor/Manage subsystems, job queues, performance (pools, memory, processors, disk utilization)	For non-MCIS related software we will need to alert the appropriate MIS person.
Monitor/Manage i-Series communications with non IBM Power I servers that are directly related to the MCIS Tax/Payroll software	Examples: retrieving tax statements print outs from web site; assessor mobile solution (future)
Monitor/Manage Robo-Copy operations directly related to MCIS Tax Software	
Coordinate cleanup activities to keep system running efficiently	
Configure Hosting Entity's devices on the iSeries equipment (Hosted Entity is responsible for physical setup).	

3. **Level 3 – includes Level 1 and 2 plus these additional duties:**

Focus on updating and patching "non MCIS applications and utilities" plus insuring compliance remains with level 30 and above as outlined in MCIS Security Guide.

Application Software	Training and Documentation is needed to transition this effort, and procedures of authorizing through product owners.
Apply Updates/Releases of non-MCIS software	
Apply Patches/Updates/Releases of non-MCIS utility software	

Security

Ensure data libraries properly secured	Advise Management on risks
Remote access to i-Series databases properly secured	Advise management on ODBC or other connectivity mechanism risks

- **Services not listed in Level one through three will be priced during contract creation and/or invoiced on time and material basis. Examples of this may be: County audit request for security information; performing functions a user could perform on the system; comprehensive DR test versus what is provided in level one.**

- Prior to initiating Level 3 support, the Hosted Entity will document procedures to be followed on non-MCIS software and utilities (e.g., vendor contact information, installing patches, releases, special configuration of iSeries components, connectivity setups between applications and to other non-iSeries servers, instructions on special downloads and uploads, etc.).

EXHIBIT 4 – MCIS SECURITY LEVEL 30/40 DEFINED

Your security level is set as system value (QSECURITY). But, just setting this value does not insure that you meet the standard as defined in the current IBM Power I OS Version Security Guide. What is discussed below are excerpt from the security guide to help define the expectations for a minimum security level being established for the hosted environment. Before changing a production system, read appropriate material in the IBM Power I security guide for migrating from one level to another, and the MCIS Security Guide.

Security level
MCIS recommend that you have a security level of 30 or 40 on your system. The following requirements would meet security level 30 or 40:
- Both the user ID and password are required to sign on.
- Only someone with *SECADM special authority can create user profiles.
- The limit capabilities value specified in the user profile is enforced.
- Users must be given specific authority to use resources on the system, which implies the users must be given specific authority to resources instead of users having all authority.
- Only user profiles created with the *SECOFR user class are given *ALLOBJ special authority automatically (see below "setting of default Special Authority"
- MCIS recommends that group profiles are setup and these groups are given *USE authority to specific resources. Specific users are attached to these group profiles.
- Users are provide no special authority as defined below.
- No default sign-on - The i-Series stops any attempt to sign on without a user ID and password that can be done on lower security levels.

Default special authorities associated with security level 30 or 40
The system security level determines what the default special authorities are for each user class. When you create a user profile, you can select special authorities based on the user class. Special authorities are also added and removed from user profiles when you change security levels.

These special authorities can be specified for a user:

*ALLOBJ - All-object special authority gives a user authority to perform all operations on objects.

*AUDIT - Audit special authority allows a user to define the auditing characteristics of the system, objects, and system users.

*IOSYSCFG - System configuration special authority allows a user to configure input and output devices on the system.

*JOBCTL - Job control authority allows a user to control batch jobs and printing on the system.

*SAVSYS - Save system authority allows a user to save and restore objects.

*SECADM - Security administrator authority allows a user to work with user profiles on the system.

*SERVICE - Service authority allows a user to perform software service functions on the system.

*SPLCTL - Spool control authority allows unrestricted control of batch jobs and output queues on the system.

You can also restrict users with *SECADM and *ALLOBJ authorities from changing this security related system value with the CHGSYSVAL command. You can specify this restriction in the System Service Tools (SST) with the "Work with system security" option.

Table 2 shows a preferred approach to granting special authorities by each user class. The entries indicate that the authority is given at all security levels, limited/controlled to a few, or not at all.

Special authority	Recommended Granting Special Authority based on Types of Work				
	*SECOFR	*SECADM	*PGMR	*SYSOPR	*USER
*ALLOBJ	All		Limited		
*AUDIT	All				
*IOSYSCFG	All				
*JOBCTL	All		Limited	All	
*SAVSYS	All			All	
*SECADM	All	All			
*SERVICE	All				
*SPLCTL	All		Limited		