Champaign County
City of Champaign
City of Urbana
University of Illinois
Village of Rantoul
Village of Mahomet
Village of Savoy

CCGISC Quarterly Update

2016 – Quarter 1

Meeting Summary

Long-Term Technology Plan Meeting – Thursday, March 10, 2016

Entity Attendance:

City of Urbana, Champaign County, Village of Rantoul, Village of Mahomet, University of Illinois, City of Champaign

Summary:

The goal of this working group is to establish a simple multi-year technology plan.

The plan will include:

1. Infrastructure Needs *(hardware, software, and storage options)*
2. Continuity of Operation Strategies and Goals
3. Capital Expenditure Needs

Meeting discussion focused on backup and disaster recovery strategies and the development of hardware replacement cycles. The table below lists the current backup strategies and possible long-term disaster recovery goals. The GIS Director will report back to the Committee the costs and other specifics needed to implement the proposed 1 to 3 year disaster recovery plan.

Back-up Strategy	
Summary:	The current back-up configuration with pending changes to be implemented by County IT department in the next couple of months were deemed acceptable by the Long-Term Technology Workgroup - no additional action is required.
Strategy:	- Virtual Servers are currently backed up to the a local backup RAID array on the Host Server. - Host Servers are backup up to host RAID array and migrated to a separate portable storage device and copied to the Tape Library Server through the network. - All backups are migrated to a dedicated Back-up Server. At least once every two weeks a tape backup will be made using Backup Exec software.
Diaster Recovery *Efficient restoration of essential functions with minimal disruption in the event of a regional diaster or emergency event*	
Summary:	Currently, no diaster recovery plan exists for CCGISC data.
Current Strategy:	See Diaster Recovery Summary
1 to 3 year Strategy:	Investigate off-site location options and costs. 1. Offsite location with necessary hardware and connectivity will support full server restoration from a back-up device. 2. Offsite location with necessary hardware and connectivity will support full server replication.
3 to 5 year Strategy:	Investigate options and costs for Cloud-based, Data Center, or hybrid (Cloud/DataCenter and in-house) approach versus in-house only solution. Any solution needs to incorporate diaster recovery.

Hardware replacement cycles were established and are as follows:

Workstations	*4-5 years*
Laptops	*4-5 years*
Servers	*3-4 years*
Monitors	*6 years*
Plotter	*7-10 years*
Large Format Scanner	*7-10 years*
Printer	*7-10 years*

Updates

ArcReader to ArcGIS Online Application Migration Progress

As expected, there was not any progress with the ArcReader to ArcGIS Online migration this quarter. The migration for the Village of Savoy, Village of Mahomet, and County Zoning will occur in the second and third quarters of 2016. In addition, CCGISC supplied the Sheriff's Department with an ArcGIS Online application to test the connection speeds from a mobile laptop. The results of the testing will determine if an ArcGIS Online application is an option for the department.

Parcel Fabric

A meeting with the technical representatives will be held in the second quarter of 2016. The representatives will discuss the possibility of migrating parcel data into the Parcel Fabric.

Response Zones

As mentioned in the 2015 – Quarter 4 update, CCGISC staff worked with METCAD to redraw the Response Zone (RZ) polygons to match the changes made to the street centerlines when eliminating the unnecessary vertices. METCAD reviewed RZ polygons and are actively using the layer in their CAD system.

Address Database Reconciliation Projects

CCGISC is working with County departments and the University of Illinois to reconcile addressing differences between the respective databases. Ultimately, the goal is to put into place procedures that will maintain consistency between the databases.

University of Illinois

The University of Illinois Police Department approached METCAD, CCGISC, the County, Urbana and Champaign to reconcile the differences between the U of I Facilities and Services building address database with the Champaign County relational address database (CC-rad). Inconsistencies between the two databases have an impact on the emergency dispatch system and the Federal Clery regulation reporting. The multi-step project began with the resolution of street name differences. Once the street name inconsistences are resolved, a script will be written to compare the addresses and the U of I building numbers.

County Clerk

The County Clerk maintains a voter address database. CCGISC staff is working with the County Clerk's office to reconcile the differences between the voter address database and CC-rad. As with the University, the first step is resolving the street name inconsistencies. There were a large number of street name, directional, and street type differences between the two databases. While this comparison is on-going, a number of street name corrections, particularly in the smaller communities, have been made. Once the street names are resolved, CCGISC will utilize a script to compare the address fields.

County Assessor

The County Assessment office maintains a property location database. This database contains a single address associated to a parcel number. Entries do not exist for all the parcels in the County. CCGIS staff is working with the Assessor and County IT to 1) reconcile addresses between the two systems, 2) populate the database for each parcel with a valid address and, 3) develop an update procedure to ensure the addresses stay current going forward.

Server Upgrades

The ArcGIS Server and Enterprise Geodatabase servers need to be upgraded in the coming months. The Enterprise Geodatabase upgrade will occur first. This server is currently running SQL Server 2008 R2, Windows Server 2008 R2 and, Enterprise Geodatabase version of 10.0. The first step involves upgrading the Enterprise Geodatabase to at least version 10.3. Once complete, the operating system and SQL Server can be upgraded. Efforts will then be shifted to upgrading ArcGIS Server. We hope to complete all the upgrades by the end of the third quarter.

CCGISC Policy Items

Capital and Technology Improvement Plan

Per the request of the CCGISC Policy Committee, a proposed Capital and Technology Improvement Plan (CIP) was presented to the Policy Committee for review. To date, CCGISC has operated without a CIP, making it difficult to budget and plan for necessary technology upgrades and replacements. The proposed CIP outlines capital improvement policies and provides five-year projections for technology related acquisitions, replacements, and improvements. The replacement cycles were based upon the discussions held at the Long-Term Technology Planning meeting. Should the plan be approved, a Capital and Technology Improvement department (department 812) will be created within the CCGISC fund (fund 850). Appropriations to this department will be based on the CIP and, when possible, reserves will be set aside for future expenditures. In addition, the department will contain a restricted fund balance line-item, formally reserving the fund balance for CIP expenditures. The GIS Director will be responsible for updating and submitting the plan each year as part of the annual budgetary approval process.

The Policy Committee provided valuable feedback. The CIP will be updated accordingly and presented alongside of the Work Plan and Report for approval at the annual budget meeting in July.

Principal Data Client Fee Increase

The CCGISC Policy Committee approved a $500 fee increase for the Principal Data Clients (PDC) beginning in 2017. This fee has not been increased since 2005. Going forward, the PDC fee will be adjusted by the same percent increase realized by the CCGSC member agencies.

Work Plan Status Report

The Work Plan Status Report is provided on the following page. As always, updates are provided in **bold**.

FY2016 Work Plan Status Report

Task		Status
2016 Improvement Tasks		
Develop Address Database Quality Control Scripts		
1-A	Develop script to check database integrity - parcel numbers, proper jurisdiction, landmark reference, etc.	**complete**
Make CCGISC Website ADA Accessible		
2-A	Finalize ADA compliancy for CCGSC website	2 external reviews complete; final review to be completed
Implement Parcel Fabric		
4-A	Discuss implementation with Technical Representatives if agreeable, begin parcel data migration	to be completed in 2nd quarter of FY2016
4-B	Migrate parcel layers to Parcel Fabric	begin in FY2016; to complete in FY2017
Create ISO Compliant Metadata		
5-A	Update existing metadata to be ISO compliant	in progress; to complete in FY2018
5-B	Create ISO compliant metadata for other layers	in progress; to complete in FY2018
2016 Work Plan Tasks		
Implement ArcReader Replacement		
1-A	Develop ArcGIS Online Applications to replace ArcReader files	deployed 3 applications; to complete in FY2016
Remove Unnecessary Vertices from Street Centerlines		
2-A	Remove unnecessary vertices from street centerlines	**complete**
Add Impedance Information to Street Centerlines		
3-A	Review Transportation feature dataset	in progress
3-B	Gather impedance data	to complete in FY2016
3-C	Update Transportation feature dataset to include impedance data	to complete in FY2016
Add Theoretical Address Ranges to Street Centerlines		
4-A	Work with METCAD to obtain desired end-product	in progress
4-B	Develop Script to assist with address range updates	to complete in FY2016
Reconcile Address data between existing County-wide Databases		
5-A	Assessment Property Location database	in progress
5-B	County Clerk Voter Registration database	in progress
Map Drainage Districts and Sub districts		
6-A	Begin pilot project utilizing Circuit Clerk documents	begin in 3rd quarter of FY2016
6-B	Map drainage districts - county-wide	to complete in FY2018
6-C	Compare GIS layer to tax rolls	to complete in FY2018
2016 Contract Tasks		
1-A	Piatt County	on going - general GIS tasks
1-B	Village of Mahomet	on going - general GIS tasks
1-C	City of Champaign	on going - general GIS tasks
1-D	Urbana Champaign Sanitary District	on going - general GIS tasks

Status updates found in ***bold*** Revised April 2016