



#### Introduction

- Clark County GIS is a CONSORTIUM
  - The Clark County Consortium for Geographic Information
     Systems has 5 local government partners.
    - Funding Partners:
      - » Clark County Fiscal Court
      - » City of Winchester
      - » Winchester Municipal Utilities
    - Contributing Partners:
      - » Clark County PVA (in kind)
      - » Clark County Public Schools (annual subscription fee)

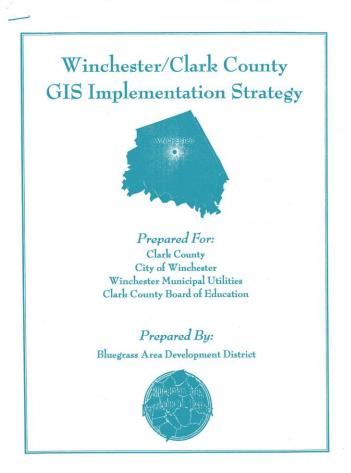


## History

- 1994: City of Winchester begins research of GIS for Winchester/Clark County
- 1995: The City of Winchester commissions an Implementation
   Strategy from Local Area Development District
- 1996: City of Winchester invites about 40 interested parties to an organizational meeting coordinated by the Bluegrass ADD
  - 3 Agencies remained after several meetings over the next year...WMU,
     City of Winchester and PVA



# 1996: Implementation Plan



- 18 page document
- Identified Potential Stakeholders
- "Starting from Scratch" Outlined process of basemapping (features, cost)
- Staffing and Technology requirements
  - 200 MHz with 64mb ram and 4GB disk storage (Cost: \$8,000)



# History

- 1997: WMU, City of Winchester and PVA sign consortium agreement
- 2001: Clark County Fiscal Court joins as "Limited Partner"
  - (Becomes Full Partner 2010)
- 2002: Clark County Board of Education joins as "Limited Partner"
  - Trying to establish funding for full partnership



# 1997: Interlocal Agreement

CONSORTIUM AGREEMENT FOR THE DEVELOPMENT, IMPLEMENTATION AND MANAGEMENT OF A COMMUNITY GEOGRAPHIC INFORMATION SYSTEM FOR WINCHESTER AND CLARK COUNTY

WHEREAS, the participants and parties to this Agreement have been engaged in a comprehensive and extensive process starting in July, 1944, and continuing to the present date, having organized and participated in over 20 public work sessions and on-site inspections; and

WHEREAS, the working group participants that remain include the Clark County Property Valuation Administration acting by and through the Clark County Fiscal Court, the Winchester Municipal Utilities Commission and the City of Winchester; and

WHEREAS, technology management and utilization is one way organizations, both public and private, can enhance their efficiency and effectiveness; and

WHEREAS, the working group participants have concluded the research and study phase of exploring the need for a Geographic Information System (GIS) for the community.

NOW, THEREFORE, based upon the foregoing statements, the Clark County Property Valuation Administration acting by and through the Clark County Fiscal Court, hereinafter referred to as the "PVA", the Winchester Municipal Utilities Commission, hereinafter referred to as "WHUC" and the City of Winchester, hereinafter referred to as "MWHUC" and the City of Winchester, hereinafter referred to as the "City", do join in this agreement corquaize, develop and manage a Geographic Information System (GIS) to be utilized and operated by the participants to this agreement consistent with the conditions stated within this agreement

Section 1. CCGIS Established. The FVA, WMUC and City hereby establish the Clark County Consortium for GIS hereinafter referred to as "CCGIS". The CCGIS is a separate entity, organized under the authority set forth in KRS 65.210 to KRS 65.300 known as the Interlocal Cooperation Act, with the power to: establish policy, see and be sued, enter into agreements, obligate funds, procure services, property and equipment, hire staff and services, own property and databases, be lessee and lessor, establish copyrights and exclusive properties and to do and perform any and all acts pursuant to the principles set forth in this agreement.

Section 2. CCGIS Governance. The CCGIS will be governed by a Board of Directors (hereinafter referred to as the "Board") consisting of one representative from each partner to this agreement. Each partner shall designate a voting member for the Board. A voting member may designate a proxy voting member. To acknowledge the proxy, the meeting minutes shall reflect that the

proxy represented the voting member. The Board shall designate a Chairperson, Vice-Chairperson and Secretary/Treasurer. A quorum shall consist of a majority of the Board members. A majority is defined as 50% plus one. Once a quorum is established, a majority of those present will be required for Board action.

Section 3. Compliance with Laws as Public Body. The CCGIS shall comply with laws as a public body.

Section 4. Adding Partners. Partners shall be added to the CCGIS by a majority vote of the Board. New partners shall pay a few to the CCGIS to be established by the CCGIS based upon the start-up cost for the CCGIS.

Section 5. Deleting Partners. Partners may withdraw from the CCGIS at any time after giving 30 days notice provided however that any agreement or contract in effect when the withdrawing partner withdraws from CCGIS shall continue to be an obligation of the withdrawing partner whether a CCGIS member or not until the end of that agreement(s).

<u>Section 6.</u> <u>Dissolution of CCGIS Partnership.</u> The CCGIS partnership may be dissolved only upon a vote of the Board. Upon dissolution of this agreement, all property held by the CCGIS in whatever form shall be disposed of as surplus property by whatever method is in the public interest as determined by the Board.

Section 7. Transfer of Membership. A member may transfer his/her membership in the Consortium so long as the transfer is approved by the Board. Such approval may require compensation from the new partner to the party transferring membership and the Consortium for the start-up costs.

Section 8. Assigning Costs. all costs associated with an individual partner nade necessary by participation in this COGIS shall be referred to as direct costs and shall be borne by that partner. All common costs or costs that cannot be assigned or designated to an individual partner shall be referred to as indirect costs and shall be borne by the CGGIS. Questions about assigning costs as direct or indirect costs shall be deemed to be policy decisions.

Section 9. Ownership of Data. All assets, specifically and especially the database in whatever format, generated from the expenditure of CCGIS funds shall be the sole property of CCGIS and may not be reproduced, used, copied, or disseminated in any way without the express permission of the CCGIS. Individual partners are not authorized to give that permission.

Section 10. Agreement Begins. The agreement shall executed same and approval has been secured from the Kentucky

Attorney General as required under the Interlocal Cooperation Act. This agreement shall expire on 12/31/98, but may be renewed.

Gene S. Kingaid

Date '

Clark County Property Valuation Administration Acting By And Through The Clark County Fiscal Court

Clark County Judge/Executive

7-23-97

Chairman, Winchester Municipal Utilities Commission

Attorney General Commonwealth of Kentucky 8.5.52

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## **Foundational Orders**

#### CITY OF WINCHESTER, KENTUCKY ORDER NO. 97-83

AN ORDER APPROVING A CONSORTIUM AGREEMENT FOR THE DEVELOPMENT, IMPLEMENTATION AND MANAGEMENT OF A COMMUNITY GEOGRAPHIC INFORMATION SYSTEM FOR WINCHESTER AND CLARK COUNTY

Be it ordered by the City of Winchester, Kentucky that the attached Consortium Agreement for the development, implementation and management of a community Geographic Information System (GIS) for Winchester and Clark County is hereby approved. The Mayor and staff are hereby authorized and directed to execute any and all documents and to do and perform any and all acts pursuant to the implementation of the program outlined in the agreement. This agreement by and between the City of Winchester, the Winchester Municipal Utility Coumission and the Clark County Property Valuation Administrator replaces, in its entirety, the agreement adopted by the Board of Commissioners on April 1, 1997.

The April 1, 1997 Agreement was a four party agreement and since that time two parties have dropped out, namely the Clark County Fiscal Court and the Clark County School Board. One party has been added, namely, the Property Valuation Administrator. In all other respects, the agreement remains the same.

The Mayor is hereby authorized and directed to serve on the Board for the governance and management of the Clark County Geographic Information System (CCGIS) as outlined in the agreement. The Mayor is authorized to designate at his election a proxy to serve in his place, should be wish to do so.

Introduced and adopted at a regular meeting of the Board of Commissioners, of the City of Winchester, Kentucky on 202 day of May, 1997.

Mayor, City of Winchester

ATTEST:

Shilp P. Gave

CLARK COUNTY FISCAL COURT
ORDER NO. 2001 – 1,25
AN ORDER APPROVING LEASE AGREEMENT WITH
CLARK COUNTY GIS CONSORTIUM

WHEREAS, Clark County GIS Consortium (hereinafter "CCGIS") and the County of Clark desire to enter into an arrangement whereby CCGIS provides demographic information relating to the spatially identified population numbers within Clark County as well as a roadway inventory based upon current CCGIS data bases, and

WHEREAS, in exchange for the providing of that data CCGIS requests an annual payment of Ten thousand (\$10,000.00) dollars as well as certain office space to be leased to it at a rate and under terms as set forth in the proposed agreement, a copy of which is attached hereto.

NOW, THEREFORE, BE IT ORDERED by the Clark County Fiscal Court in duly session assembled as follows:

SECTION ONE: That the agreement between Clark County GIS Consortium and the Clark County Fiscal Court, a copy of which is attached hereto, is hereby approved.

<u>SECTION TWO:</u> That the Clark County Judge/Executive shall execute, on behalf of the Clark County Fiscal Court, said Agreement to take effect as set forth therein.

SECTION THREE: That the Clark County Treasurer is hereby authorized to pay over to CCGIS Ten thousand (\$10,000.00) dollars due pursuant to Section Four of the agreement.

SECTION FOUR: This Order shall take immediate effect.



# The Money

- 1997-1998: \$90,000 for Data Collection
  - Road Centerlines, address points
- Annual Budget 1999-2000 \$115,000
- Annual Budget 2000-2001 \$132,500
- 2007-2008 Operating Budget \$218,887



# The Money

- 2014-2015 Operating Budget \$226,124
  - City of Winchester \$87,900
  - WMU \$87,900
  - Clark County Fiscal Court \$83,595 (office space)
  - Clark County Board of Education \$12,500
  - Clark County PVA In Kind





# Why on Earth?

- Why would you want to create a GIS
   Consortium?
  - Economy of Scale
  - Knowledge Base
  - Connections and Collaborations



# Why? Economy of Scale

- Small, Local Government Agencies find it difficult to fund a dedicated GIS Department
  - The Consortium allows agencies to share operations and capital expenses
  - CCGIS O&M Budget (FY2014-2015): \$226,000
  - CCGIS Capital Budget (FY2013-2014):\$70,000



# Why? Economy of Scale

- In Kentucky, a small local government can expect to pay ~1.75x for each employee in employee related expenses, alone
- Software and technology are still not cheap
- Data collection projects (i.e. LiDAR and Orthophotography) can run into the \$100,000's



# Why? Economy of Scale

- Dividing these costs over multiple agencies make the GIS system affordable and easier to maintain over the long term
- CCGIS partners support a \$350k budget for the cost of only \$90K



# Why? Knowledge Base

- The GIS Consortium can effectively and efficiently share data
  - SEAMLESSLY
- The GIS Consortium can serve as a data clearinghouse for all data sets for partner organizations.



# Why? Data Sharing

- Having the GIS system loaded with this data, allows it to be deployed with few, additional agreements or negotiations:
  - The utilities get property ownership and addresses
  - Emergency services get fire hydrant data and road centerline
  - County Government gets comprehensive information on utilities, emergency services, and property ownership



# Why? Connections

- The GIS Consortium can serve as a focal point that allows various, exclusive jurisdictions to collaborate
  - The meetings and discussions around GIS Systems can generate goodwill and serve to keep these jurisdictions connected on a regular basis.



#### How on Earth?

- How do you create a GIS consortium?
  - Identify Stakeholders
  - Meetings, LOTS OF MEETINGS
  - Review of Legal Framework
  - Review of Practical Framework
  - Review of Fiscal Framework
  - MORE Meeting and Presentations
  - Needs Assessment
  - Adoption of resolutions, ordinances, and orders by legislative bodies to enter into agreements



#### How on Earth?

Wendell: It's a mess, ain't it, sheriff?

Ed Tom Bell: If it ain't, it'll do till the mess gets here.

- "No Country for Old Men"



## How? Stakeholders

- Identify Stakeholders
  - Ideally, all local government agencies and jurisdictions would be involved
  - Varying Degrees
  - Existing Capabilities
  - Some offices/agencies may already have GIS staff or GIS systems in place
    - Tread carefully here!



## How? Stakeholders

- Identify offices in the area, city, county, region that already use GIS systems or would benefit from GIS systems
  - City government (and agencies)
  - County government (and agencies)
  - Public Private Utilities
  - Road Departments
  - State Agencies working in the region
  - Tax Assessor
  - School Districts



# How do you create a GIS consortium?

- Did I say Meetings?
  - Find Champions who really want this to happen
  - Organize meetings with legislative boards and commissions



# How do you create a GIS consortium?

- Needs Assessment
  - Critical to examining the state of existing GIS capabilities
    - Q: How will all of this fit together?
    - Q: What are startup costs?
  - Helps define and identify roles of stakeholders
  - Draws a Road Map to GIS Program: Visions,
     Missions, and Strategic Plans.



#### How? Stakeholders

- Once potential partners have been identified, hold meetings with executive office at each agency to gauge interest and establish "formation" meeting dates
- Determine a lead agency to keep the process on track
- Meet Regularly to keep stakeholders informed on the formation process



# How? Legal Framework

- The lead agency needs to research the Legal Framework of the Consortium <u>VERY EARLY</u> in the process, to answer questions like:
  - Can separate local agencies enter into funding agreements?
  - Can local agencies enter into agreements with non-governmental (profit and non-profit) orgs?



# How? Legal Framework

- Lead Agency
  - The lead agency will need to provide the legal research and communicate to potential stakeholders



# How? Legal Framework

- Legal Questions
  - What legal steps are required for formation of new consortium?
  - What alternatives are available to agencies if a new organization cannot be formed?
    - Multiple, separate data sharing agreements
    - Single agency hosts with others participating by subscription



#### **Politics**

- Are there any political considerations when establishing a GIS Consortium?
  - Of course!
    - "IT'S MINE! YOU'RE GONNA PAY TO USE IT!"
    - "I'm a DEM and she's a REP. It's a GOP TRAP!"
    - Operating below and above "The Fray"
    - Mutually Beneficial Relationships
      - "Kumbaya" Moments





- What is the ROI?
  - The return on investment of a GIS Program can be determined in multiple ways.
    - THE "EFF" WORDS:
      - Time and Cost Savings (Efficiency)
      - Effective Governance



What is the ROI?

Q: DO THE DECISION MAKERS UNDERSTAND?

A: YES, IF YOU MEASURE IT

- Create metrics that are measurable and comparable
  - Establish Price Policies (cost for service)
  - Track Requests and Contributions to projects
    - Measure these in \$\$\$'s



- What is the ROI?
  - Communication of ROI is important to the Political and therefore, Fiscal health of the GIS

    Organization
  - Communicate ROI monthly: via Memos
  - Communicate ROI quarterly: via reports
  - Communicate ROI annual: via presentations



What is the ROI, again?
 ROI = BENEFITS - COSTS

Return on Investment of a well-managed GIS Consortium will always be a positive

 REMEMBER: set policies and procedures that allow measurement of costs and benefits



# **Price Policy and Licensing**

#### CCGIS CONSORTIUM POLICY AND PROCEDURES

SECTION: 200

POLICY NUMBER: 201.00

APPROVAL DATE: January 22, 2004

SUBJECT: CCGIS Product and

Services Fee

EFFECTIVE: January 22, 2004

#### STATEMENT OF POLICY-

To recover CCGIS expenditures in capture, creation, and maintenance of GIS coverages and databases, and to re-coop media fees associated with the delivery of said databases including both digital and hardcopy formats, a fee schedule must be created for purchase of CCGIS coverages, databases, maps, or use of staff time. CCGIS, located at 34 South Main Street, Winchester, KY, is to be the sole distribution site of all CCGIS databases and products. This fee schedule does not apply to CCGIS

#### STATEMENT OF PROCEDURE-

As authorized and adopted by the CCGIS Consortium Board, the following prices are applicable to data requests made to the CCGIS. All fees are due and payable at the time of the records request.

Standard Base Mapping Sheets (Containing Roads, Road Names, Parcels, and Parcel ID Numbers on 24" X 36" hardcopy sheets; price per map sheet):

Color Copy

Standard City and County Plots (Includes maps that have been created by

	D Size	52"X36"
Clark County Road Map	\$5	\$10
Winchester Road Map	\$5	\$10
Voting Precincts	\$15	\$30
Magisterial Districts (City or County)	\$15	\$30
School Board Districts (City or County)	\$15	\$30
Zoning Wall Man	NA	\$40

Other City or Countywide Plots of other standard CCGIS maps are priced at \$10 per layer plus the \$10 charge for the road base. (Other plots at other scales are priced according to Standard Base Mapping Sheet fees, listed above, and Custom Plots in Item II and any fees from Item V.)

#### DATA PRODUCTS LICENSE AGREEMENT

This License Agreement made and entered into this teense agreement made and entered into this \_\_\_\_\_\_ day or \_\_\_\_\_ by and between Clark County GIS Consortium \_\_\_\_\_ (Licensee). The terms and conditions

Licensee's use of the data products designed and compiled by CGIS(hereinafter "Products") to which this notice is attached or which are hereafter provided pursuant to this agreement constitutes acceptance of this

hereafter provided pursuant to this ways to the Products within 2. This License Agreement.

2. This License are allows unlimited use of the Products within one should be a considered of the License of the License of the Constant of the License of the Constant of the License of the Constant of the Cons

Products are developed is in preliminary form, subject to change. Original sources, when available, should be used in any application which requires specific accuracy, completeness, or currency. Products comply with Kentucky State Office of GIS Standards, but do not meet exact engineering standards. The use of the Products for engineering purposes, is done at the sole risk

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victions the written moment or outsided number of hard copy prints of the digital data or its derivatives as required for its personal internal use. All copies must designate the Copyright of CCGIS.

6. Use of the Products under this License is limited to in-house applications such as data capture, digital geographic database production and design, and for the normal furtherance of the License's daily business mapping activities.

mapping activities.
7. Licensee shall pay CCGIS all fees due for the Products distributed under this Agreement in accord with the current fee schedule prior to its receipt of the Products.

receipt of the Products.

8. If Licensee distributes the Products to others, or otherwise violates this Agreement, it shall pay all fees and penalties due for the misuse or distribution of the Products, or for violation of this Agreement in accord with the current fee and penalty schedule adopted by CCGIS.

9. Licensee will defend, indeemily, and hold CCGIS haraless from any and all liability for any loss due to any claim arising out of Licensee's use of the Products supplied hereunder including reasonable attorney's fees.

10. In the event that Licensee shall violate any provision of this Agreement. CCGIS may immediately terminate this Licensee Agreement and Licensee while immediately return all Products supplied and copies thereof made to CCGIS in the semidiately terminate this Licensee Agreement. CGIS is also specified to the CCGIS in the considerately terminate this Licensee and Licensee who have assigned or transferred without the

made to CCGIS.

11. This License may not be assigned or transferred without the express written consent of CCGIS.

12. The rights and obligations of the parties under this Agreement shall be construed in accordance with and governed by the laws of the Commonwealth of Kentucky and shall be binding upon the successors and assigns



# Configurations

- GIS Consortium as independent office
- GIS Consortium as department of member
- GIS Consortium HYBRID



- Need staff that have a broad range of basic knowledge about operations of members
- Establishment of Teams
- Budgeting and staying on top of the money
- Keep relationships fresh and beneficial



- Need staff that have a broad range of basic knowledge about operations of members
  - GIS staff in a consortium will be dealing with a wide range of subject matter: dead animals to wine-tasting tours
  - GIS staff must be willing and able to learn basics of supported agency operations
  - Hiring GIS staff will depend, not only on technical prowess, but lucid, and flexible work ethic



- Establishment of Teams
  - To supplement the smaller staff size of a consortium,
     TEAMS BECOME IMPORTANT
  - The consortium must remain in constant communication with the management at member organizations
    - This will allow GIS Consortium to call upon knowledge and experience of staff at member orgs to strategically plan, tackle projects, and meet the needs of the partners
  - PARTNERS ARE THE STAKEHOLDERS
    - THE GIS CONSORTIUM IS THE WORKHORSE



- Budgeting and staying on top of the money
  - If the consortium has its own revenues and budget
    - THEN, the GIS manager needs to have the tools and resources available to track expenses
    - GIS manager needs to know or quickly learn the jargon of the accounting of governmental agencies
      - GASB, Funded Depreciation, O&M vs Capital Expenses
    - GIS manager needs to carefully measure needs versus benefit and costs to member organizations
      - What the GIS thinks is COOL, may not be a great fit for partners



- Keep relationships fresh and beneficial
  - There is no substitute for COMMUNICATION
    - CCGIS has monthly Board Meetings
  - If no Board, then a local ad-hoc Technical Committee should be formed to communicate the actions and direction of the GIS Consortium
  - Stay aware of partner projects and be prepared to step in to help with GIS technologies
    - If allowed, attend committee meetings for partner orgs and identify programs and projects that could be improved by GIS



# Change Management

- Consolidation of Resources
- THE ELECTION!
- The education never stops...
- Proof of concept projects for all



# What could possible change?

- The biggest challenge to forming a new GIS
   Consortium
  - CONSOLIDATION OF RESOURCES
    - Sharing = Surrender : staff and resources
    - Sharing = Surrender: command and control

KEEP THE BENEFITS IN MIND



# What could possible change?

- If the Stakeholders are local government organizations, then there is that little thing called THE ELECTION
  - The GIS consortium must work hard to remain loyal to the administrations that support it:
    CURRENTLY and IN THE FUTURE
  - ONE WORD: NEUTRALITY



# What could possible change?

- What if the current administration is a cheerleader for GIS consortium and gets voted out?
- THEN, you must work hard to gain the trust and admiration of any new faces in the Executive and Legislative chairs.
  - From day one, offer your support and follow through on projects that are important to the new officeholders.



# This technology stuff...

- Is Complicated
- Changes so fast
  - Make sure to prepare your organization for changes in technologies and industry standards
  - Continuing education is VITAL



# What if we did this or that?

- GIS can do proof concept projects to show the utility of GIS technology and workflows
- These new projects can help drive change at the member organizations
  - DISRUPTIVE
  - BENEFICIAL
  - RIGHT!

