

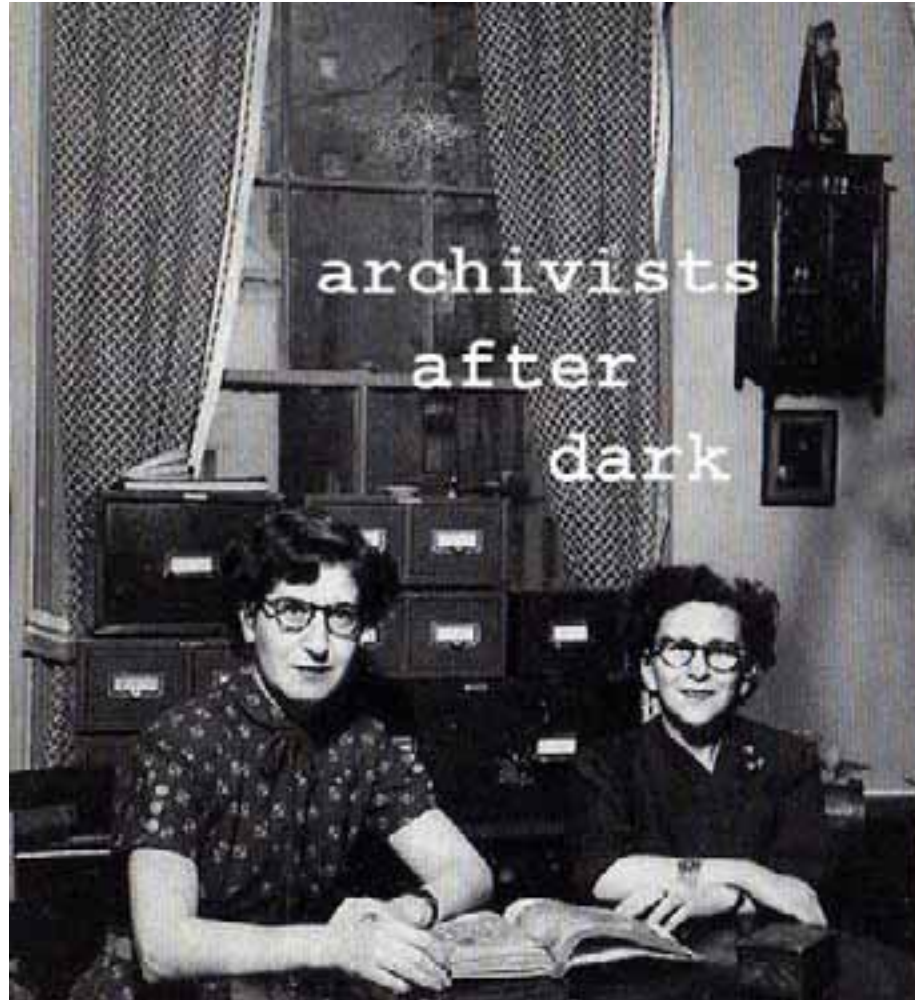
GeoArchiving 101 For Fun, Profit and Peace of Mind

Matt Peters, Utah Automated Geographic Reference Center (AGRC)

Mary Samouelian, North Carolina State Archives

ESRI International User Conference | 14 July 2010 | San Diego, CA

How We See Each Other



How We See Each Other (cont.)

Nad83 rules!

Rock on, bro!



What is GeoMAPP?

- ▶ Preservation of “at risk” superseded geospatial content
- ▶ Building the relationship between State GIS and Archives staff
- ▶ Interstate partnerships
- ▶ Exploration of business case drivers
- ▶ Data replication among several states
- ▶ Implementation of a geographically dispersed content-exchange network
- ▶ Local, state and national outreach

Who is GeoMAPP?

- ▶ NC Center for Geographic Information and Analysis (CGIA)
- ▶ North Carolina State Archives
- ▶ NC State University Libraries

- ▶ Kentucky Department of Libraries and Archives (KDLA)
- ▶ Kentucky Division of Geographic Information (DGI)
- ▶ Kentucky State University

- ▶ Utah Automated Geographic Reference Center (AGRC)
- ▶ Utah State Archives

- ▶ 10 Informational Partners: DC, GA, ME, MD, MN, MT, NY, TX, WI, WY
- ▶ Currently releasing an RFP to include additional partners

- ▶ The subject matter is becoming more timely..... The Library of Congress and Columbia University recently announced “an agreement to create a web-based clearinghouse of information about best practices for **preserving significant geospatial data.**”

GIS Approach to Geoarchiving

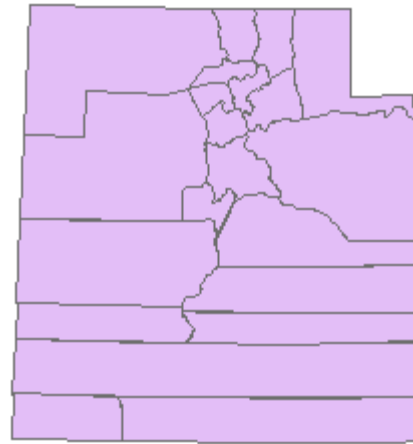
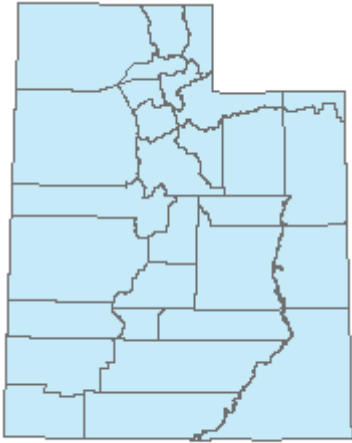
- Data on our machines
- Backups from a Database
- Data moved and stored on another live system



Archivist's Approach to GeoArchiving

- ▶ **Business planning for sustainable archives**
 - ▶ Translation: We know we have stuff that's worth keeping, but how do you convince others?
- ▶ **Inventory**
 - ▶ Translation: What stuff do we have?
- ▶ **Appraisal**
 - ▶ Translation: What stuff is important to keep, why, and for how long?
- ▶ **Data transfer and ingest**
 - ▶ Translation: Giving important stuff to the archives and making sure it gets to the right place.
- ▶ **Accessibility**
 - ▶ Translation: Making this stuff available to people who might be interested in seeing or using it.
- ▶ **Long-term preservation**
 - ▶ Translation: Making sure this stuff is kept forever, forever, forever...

Why Preserve Geospatial Data?



Counties change over time
Aerial photography over
time

Different Vintages of Aerial
Photography




Noxious weed movement..



Why Archivists Care

- ▶ Legally bound to preserve and make it available to the public.
- ▶ This information may be of interest to researchers in the future.
 - ▶ Potential for spurring “new” knowledge from existing data
 - ▶ Re-using, re-analyzing and recombining datasets in innovative ways (e.g. mashups)

... in conclusion, that's
how historical GIS can
solve world peace.



My hero!



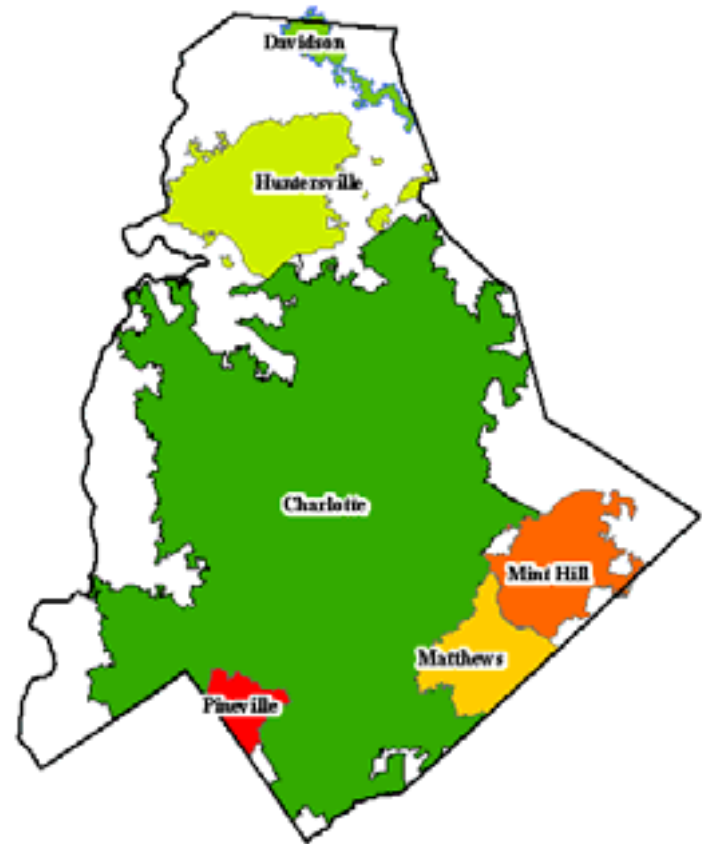
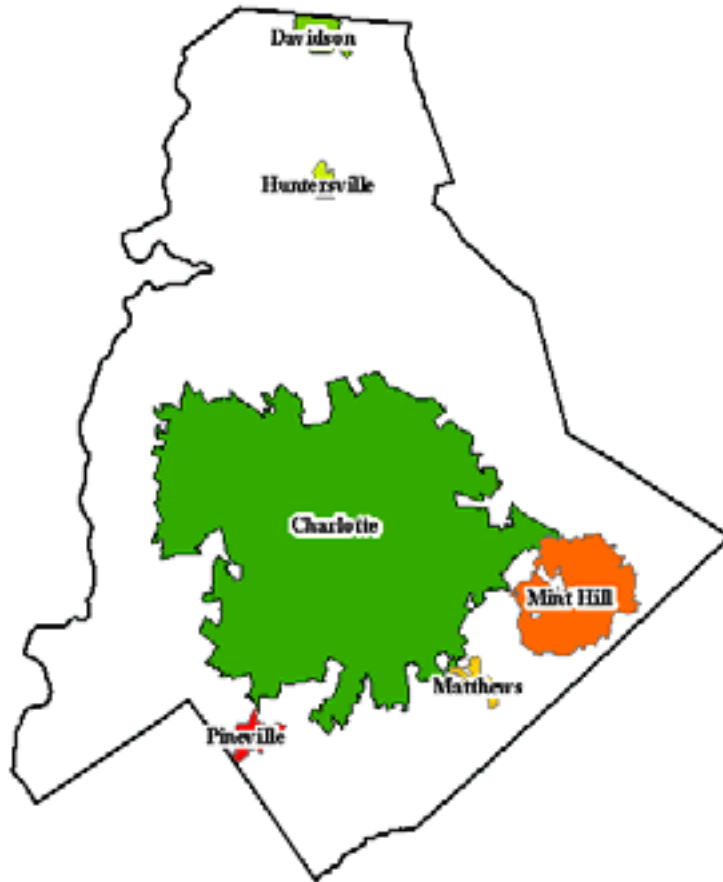
<http://www.flickr.com/photos/nationalarchives/3008584298/>

Uses for Superseded Geospatial Data

- ▶ Threatened and Endangered plant and animal species tracking
- ▶ General Wildlife Habitat studies
- ▶ Community meetings looking at issues

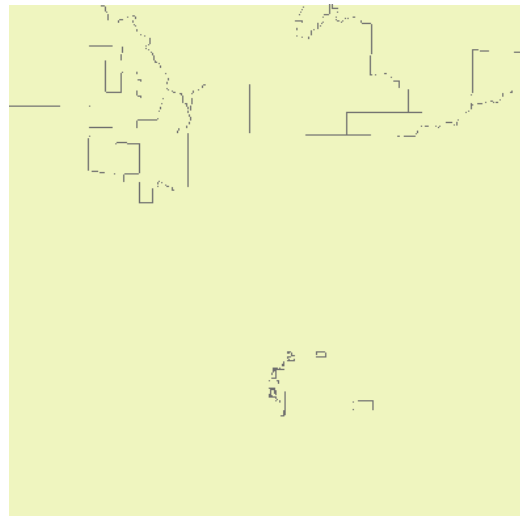
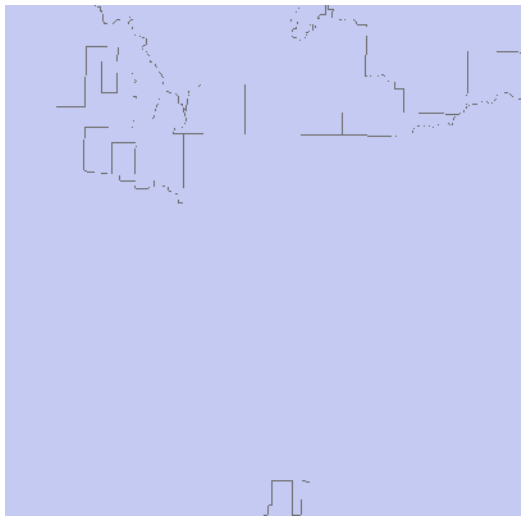


Uses for Superseded Geospatial Data (cont.)



Philosophical Shift

- ▶ Early GIS days we always focused on the latest and greatest data.
- ▶ Once a new layer was produced ... out with the old!
- ▶ Now we save data based on a vintage, when is the data updated? Sometimes based on a tax year. Taxes were assessed by the boundaries that were current for X year.



A New Way of Thinking



<http://www.flickr.com/photos/lseilibrary/4114751368/sizes/o/>



<http://www.flickr.com/photos/dukeyearlook/sets/72157621179687840>



<http://mymill.files.wordpress.com/2009/08/information-technology.jpg>



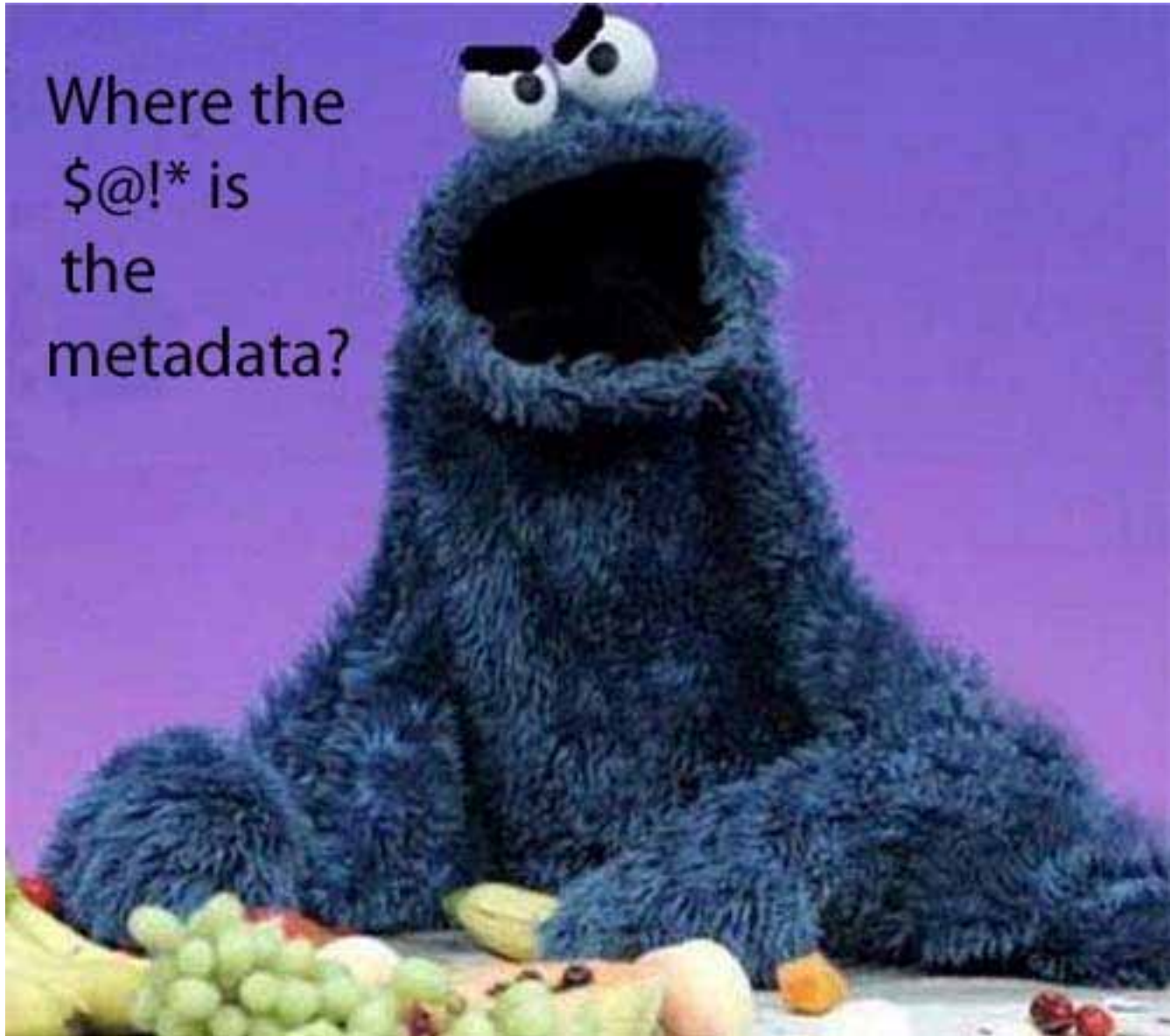
What can I do to make my data more useful
for others now

...and more “preservation ready” for the
future?

Making GIS Data Preservation Ready

- ▶ Is your data complete?
- ▶ Is it clean?
- ▶ Are your attribute names understandable?
- ▶ When you create data do you do it with an eye to a wider audience?
- ▶ What format did you put it in? – some formats are easier to share than others

Where the
\$@!* is
the
metadata?



What Archivists Need

▶ Metadata

- ▶ Just do IT! (no, really, we mean it)
- ▶ Ideally FGDC compliant
- ▶ Important fields:
 - ▶ Who (creator)
 - ▶ What (title/description)
 - ▶ Where (geographical extent)
 - ▶ When (publish date)
 - ▶ Why (reason it was created)
- ▶ Make the metadata as “good” as possible

Other Best Practices

▶ File naming

▶ Descriptive title

- ▶ "Shellfish_Growing_Areas_2009" versus "SGA"
- ▶ "0608_014.sid"

▶ Attributes

- ▶ Logical Name
- ▶ Explanation in metadata record

▶ Format awareness

- ▶ Versioning and file type

Location: | 010,977,440 130,007,101 meters

Field	Value
FID	1567
Shape	Point
SHAPE_SRC	11797
SOURCEID	1495
PWS_ID	0343510
EPA_SRC_ID	1
OWN_LOC_CO	W01
SRC_TYPE	G
SRC_NAME	WELL #1
SRC_AWL	P
SRC_LOCATI	NEAR OLD COOKING CABIN
LOCN_DTRM	F
WELL_I_RAT	H
WSWCLASS	
RWQ_RATE	
INTK_LOC	
VTFLD_GPM	12



Geospatial content on the State Library of North Carolina Digital Repository

Please use this identifier to cite or link to this item: <http://hdl.handle.net/10602/335>

Full metadata record

DC Field	Value	Language
dc.contributor.author	Legislative Research Commission, Kentucky	-
dc.date.accessioned	2008-11-20T21:26:59Z	-
dc.date.available	2008-11-20T21:26:59Z	-
dc.date.issued	2002	-
dc.identifier.uri	http://hdl.handle.net/10602/335	-
dc.language.iso	en_US	en
dc.title	House District ESRI geospatial files	en
dc.type	Map	en
dc.subject.gls	State government - Kentucky General Assembly	en

Appears in Series: [Maps \(M0051\) - Legislative Research Commission](#)

Files in This Item:

File	Description	Size	Format	
KYHOUSE.DBF	Database file	3.97 kB	DBF	View/Open
kyhouse1.shp	Shape file	2.92 MB	Shape file	View/Open
kyhouse2.shx		900 B	shx	View/Open

[Show simple item record](#)

Geospatial content on KDLA's digital repository.

Shameless Plug

- ▶ Want to learn more about preserving geospatial data?
 - ▶ **Wed, Jul 14, 3:15 – 4:30PM**
Mapped Today; Zapped Tomorrow? Preserving Government Digital Geospatial Data
Room 28 B
 - ▶ **Thu, Jul 15, 12:00PM – 1PM**
Data Preservation Special Interest Group
Room 28 D
 - ▶ Visit the **GeoMAPP website** at www.geomapp.net

Contacts

- ▶ Matt Peters (AGRC)

mpeters@utah.gov

- ▶ Mary Samouelian(North Carolina Archives)

mary.samouelian@ncdcr.gov

<http://www.geomapp.net>

