Preservation and discovery for GIS data

Esri User Conference 2015

Jack Reed | @mejackreed
Preservation of GIS Data

Who has a preservation plan for their geospatial data?
Preservation of GIS Data

Can your organization afford the loss of data or metadata?
We treat GIS data in an ephemeral manner.
Preservation of GIS Data

Preservation goes beyond just “having backups” or even “having a disaster recovery plan”.

Stanford University
Preservation of GIS Data

“…all of the actions required to maintain access to digital materials beyond the limits of media failure or technological change.”

- Digital Preservation Coalition
“Metadata is a love note to the future.”

#nypl_labs  twitpic.com/6ry6ar
Preservation of GIS Data

ArcGIS Desktop 10.x software supports:

- +31 data formats
- +84 raster formats

How can +115 formats be supported for future use?
Discovery has traditionally meant “geoportals”
Discovery of GIS Data

But lately ... open data portals have taken over this space
Discovery of GIS Data – emergence of GeoBlacklight

- Do one thing really well

- Align technology stacks

- We found others with the same needs as us

- Build on the foundation of an existing ecosystem

- Combine preservation with the power of discovery

- Support variety web services (WMS, WFS, IIIF, MapService, FeatureService)
Bringing it all together

Metadata

Wrangling

Curation

Delivery

Discovery
Bringing it all together

Data Wrangling

Format Conversions
- Raster -> GeoTIFF
- Vector -> Shapefile

Delivery and Preservation
Bringing it all together

Metadata creation in ArcCatalog

Metadata Conversions
- ISO19139
- MODS
- GeoBlacklight-Schema

Indexing and Preservation
Stanford Spatial Data Infrastructure

Data is available and accessible to the public at:

https://earthworks.stanford.edu
Thanks!

For more information about GeoBlacklight:

http://geoblacklight.org

To collaborate on some of these problems together join us on the Hydra Geospatial Interest Group:

https://wiki.duraspace.org/display/hydra/Hydra+Geospatial+Interest+Group