GIS INVENTORY

Powered by the Ramona System

Incorporating State Clearinghouse Nodes

FGDC Coordination Group

NSGIC

National States Geographic Information Council

Bill Burgess, Washington Liaison

Relevant to the Discussion

- The Content Standard for Digital Geospatial Metadata (CSDGM) was introduced in 1994
- We currently don't have a national system to manage everyone's metadata – we're 'floundering'
- A very large number of GIS Users across the nation (possibly 75%) simply don't document their data to the CSDGM Standard (or any other standard)
- The GIS Inventory was designed to help capture those users

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Purpose of the GIS Inventory

- Track the status of GIS in state and local government
  - Provides the status of data development for planning purposes
  - Characterizes the User Community (many system & policy questions)
  - Can't manage what you don't understand
- Locate data and users
- Works in concert with federal programs for broad data discovery
- Provides a single national inventory tool
  - Reduces the need for the multiple inventories conducted by federal and state agencies

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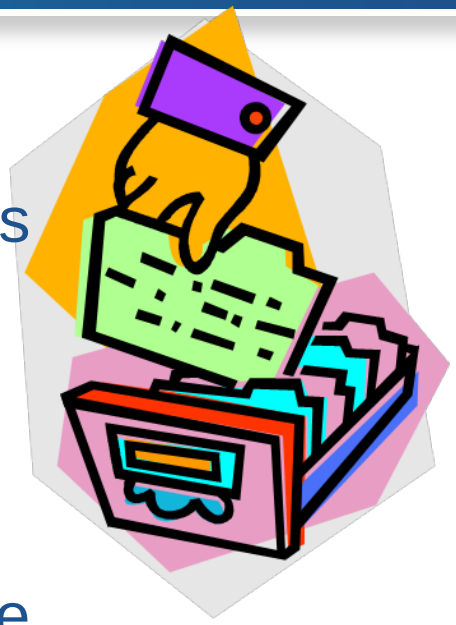
Not a Metadata tool



- Ramona is a management info system
- Most metadata systems produce card catalogs (not dependable for finding all information)
- We produce CSDGM compliant metadata because it is the standard for connecting to other systems
- We plan to import existing metadata from state clearinghouses and other tools, but this information will not fully populate the GIS Inventory database – DHS is funding this effort

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Example from Wisconsin report based on the GIS Inventory

Orthoimagery
Foundational Element: Geographic Reference Frameworks
Framework Data Category: Orthoimagery

Statistics:

- 100% county-based coverage
- 4-5 year iterative planning cycle for many counties
- > 15 counties indicated "planned" imagery in 2010 – the actual number is suspected to be 2-4 times that number.
- Oblique imagery is rising in popularity, as well as in current and future investment.

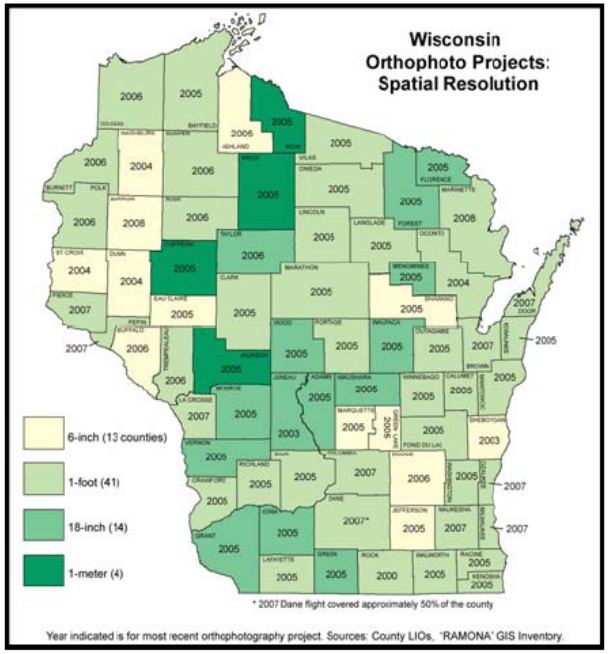

Figure 16 – Orthophoto Spatial Resolution

Related Information:
With little ambiguity, it is clear that 100% of Wisconsin counties have invested in locally-funded orthoimagery sometime over the last 15 years – in some cases, in 4 or 5-year iterations. This aerial imagery rectified to ground control for integration in GIS systems has great value in collection, registration, and quality assurance of other foundational GIS layers.

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State Clearinghouse Nodes

- Information from May 2011 provided by previous GOS Portal Team
  - 60 Registered State Clearinghouse Nodes
    - 67 Harvested Sites
  - 59,385 Metadata Records
  - 18 have less than 25 metadata records
  - Idaho had 17,753 metadata records (30%)
  - Last harvest dates for nodes ranged from October 2005 to May 2011

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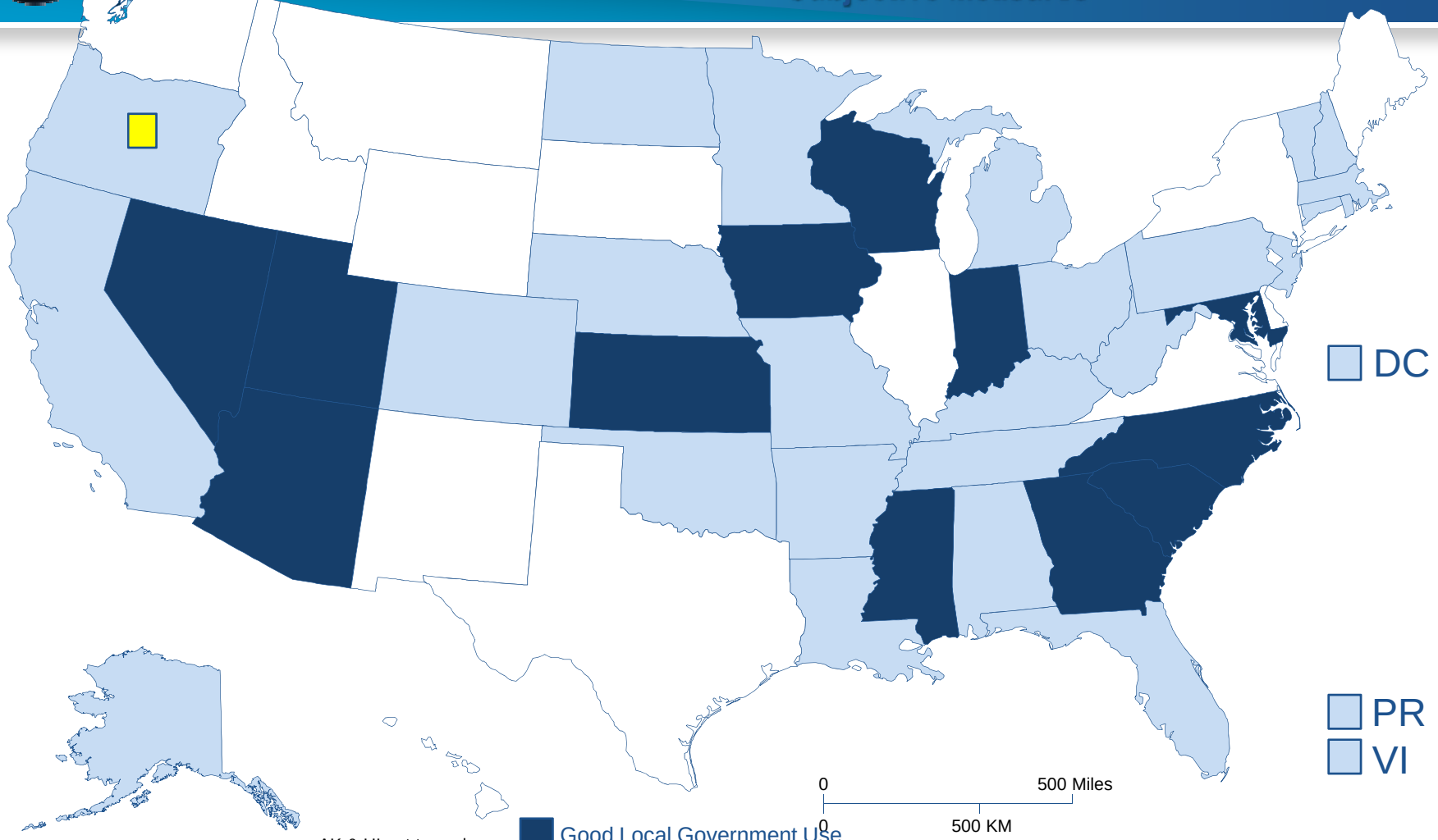
Current Picture for Inventory

Subjective Measures



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Issue 1: Name Game

Controlled Data Fields versus Free Text

Digital Orthophotography/Orthoimagery

- Digital Imagery
- Digital Photography
- Imagery
- Photography
- Aerial Photography
- Aerial Photos
- Aerial Imagery
- Satellite Imagery
- Orthoimagery
- Orthophotography
- Digital Orthoimagery
- Digital Orthophotography
- Quarter Quads
- DOQQs
- Digital Quads
- NAIP Imagery
- 133 Cities Imagery

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Issue #2: Data Integration

- Controlled Fields
  - For data, we control entries for source material, scale, update frequency and other pieces of information
  - GIS Inventory may compromise on select fields to simplify ingestion
  - Remaining fields will very likely require one-time human interaction to import data from Clearinghouse sites

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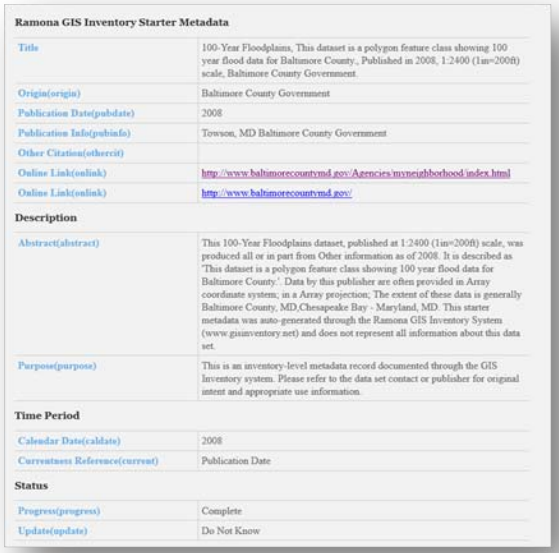
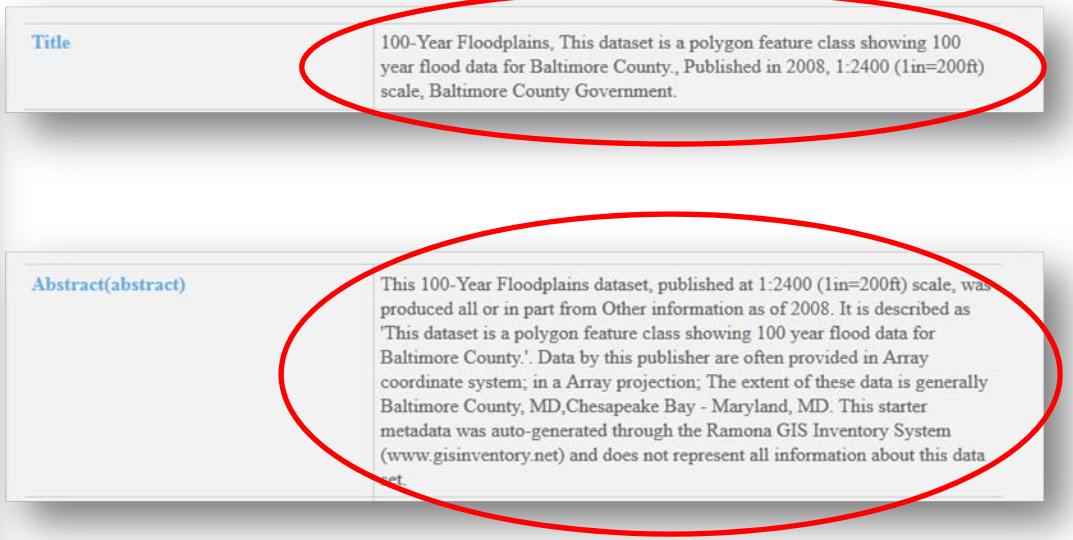
Issue #3: Scope of Metadata

- **GIS Inventory**
  - Sections 1 & 7 Complete
  - Partial information from Sections 2 through 6 is in the title and abstract
- **Full CSDGM Metadata**
  - All 7 Sections



Ramona GIS Inventory Starter Metadata

Title	100-Year Floodplains, This dataset is a polygon feature class showing 100 year flood data for Baltimore County., Published in 2008, 1:2400 (1in=200ft) scale, Baltimore County Government.
Origin(origin)	Baltimore County Government
Publication Date(pubdate)	2008
Publication Info(pubinfo)	Towson, MD Baltimore County Government
Other Citation(othercit)	
Online Link(onlink)	http://www.baltimorecountymd.gov/Agencies/myneighborhood/index.html
Online Link(onlink)	http://www.baltimorecountymd.gov/
Description	
Abstract(abstract)	This 100-Year Floodplains dataset, published at 1:2400 (1in=200ft) scale, was produced all or in part from Other information as of 2008. It is described as 'This dataset is a polygon feature class showing 100 year flood data for Baltimore County.'. Data by this publisher are often provided in Array coordinate system; in a Array projection; The extent of these data is generally Baltimore County, MD,Chesapeake Bay - Maryland, MD. This starter metadata was auto-generated through the Ramona GIS Inventory System (www.gisinventory.net) and does not represent all information about this data set.
Purpose(purpose)	This is an inventory-level metadata record documented through the GIS Inventory system. Please refer to the data set contact or publisher for original intent and appropriate use information.
Time Period	
Calendar Date(caldate)	2008
Currentness Reference(current)	Publication Date
Status	
Progress(progress)	Complete
Update(update)	Do Not Know



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Issue #4: Scope of All Data

- GIS Inventory
  - Managed as a database
  - Focus is wide
    - User
    - Organization
    - Systems
    - Policies
    - Geography
    - Data
- Clearinghouse Nodes
  - Managed as a catalog
  - Focus is narrow
    - Data

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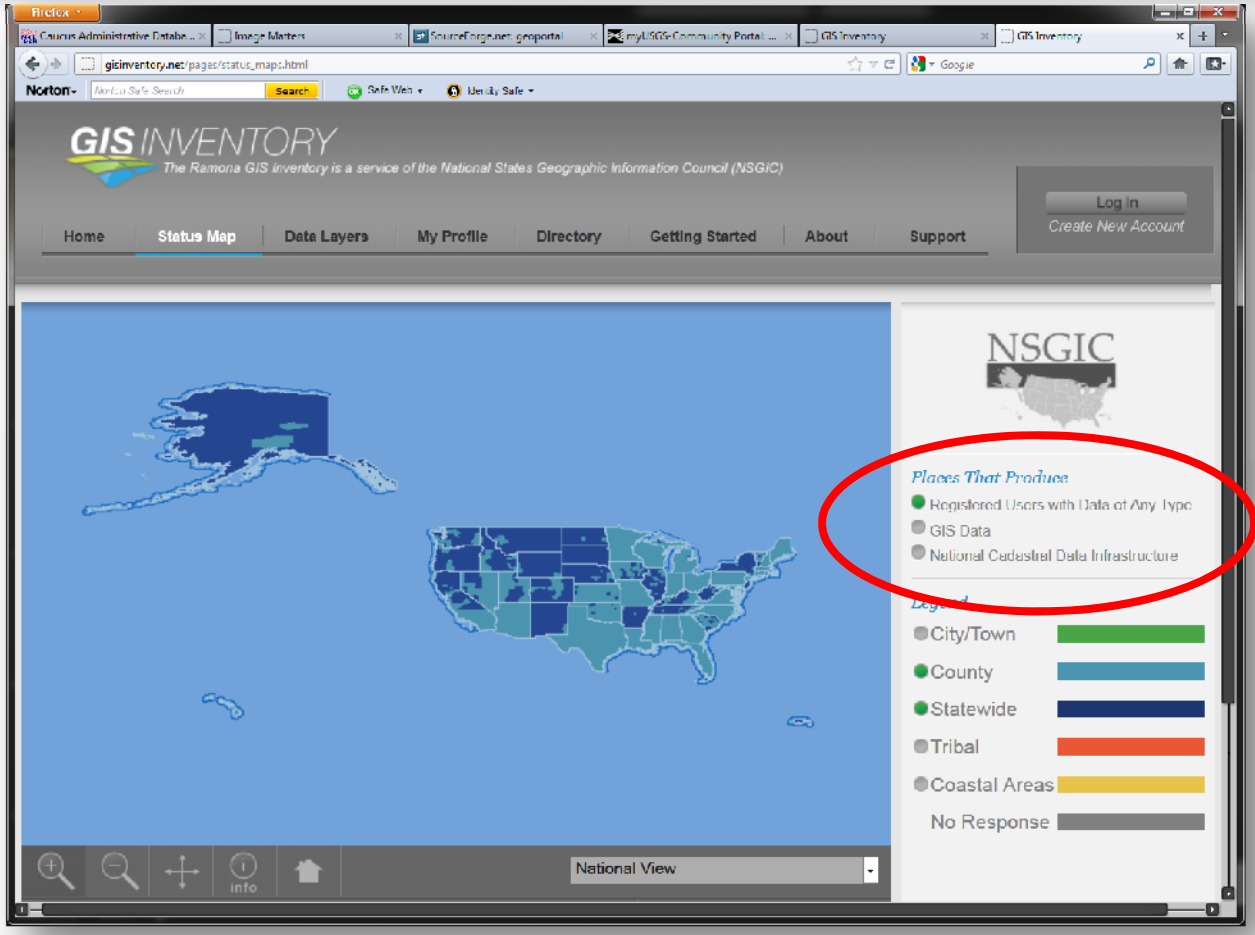
Issue #5: Apples and Oranges



GIS Inventory (GIS Data)
National Cadastral Data

Operate Differently

The same may be true for the Clearinghouse Nodes

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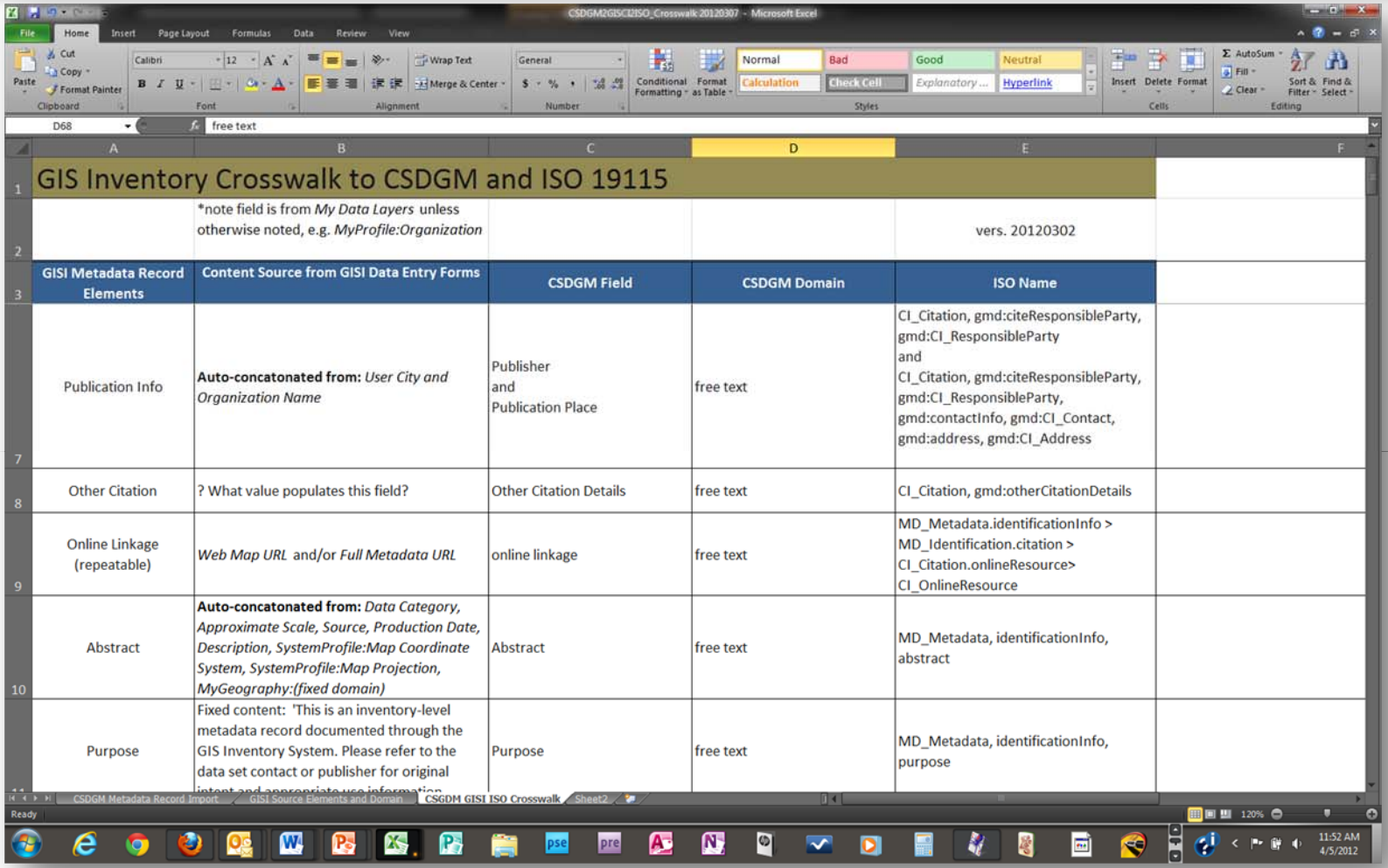
Completed a Crosswalk



GIS Inventory Crosswalk to CSDGM and ISO 19115

*note field is from *My Data Layers* unless otherwise noted, e.g. *MyProfile:Organization*

vers. 20120302

GISI Metadata Record Elements	Content Source from GISI Data Entry Forms	CSDGM Field	CSDGM Domain	ISO Name
Publication Info	**Auto-concatonated from:** *User City and Organization Name*	Publisher and Publication Place	free text	CI_Citation, gmd:citeResponsibleParty, gmd:CI_ResponsibleParty and CI_Citation, gmd:citeResponsibleParty, gmd:CI_ResponsibleParty, gmd:contactInfo, gmd:CI_Contact, gmd:address, gmd:CI_Address
Other Citation	? What value populates this field?	Other Citation Details	free text	CI_Citation, gmd:otherCitationDetails
Online Linkage (repeatable)	*Web Map URL* and/or *Full Metadata URL*	online linkage	free text	MD_Metadata.identificationInfo > MD_Identification.citation > CI_Citation.onlineResource> CI_OnlineResource
Abstract	**Auto-concatonated from:** *Data Category, Approximate Scale, Source, Production Date, Description, SystemProfile:Map Coordinate System, SystemProfile:Map Projection, MyGeography:(fixed domain)*	Abstract	free text	MD_Metadata, identificationInfo, abstract
Purpose	Fixed content: 'This is an inventory-level metadata record documented through the GIS Inventory System. Please refer to the data set contact or publisher for original	Purpose	free text	MD_Metadata, identificationInfo, purpose

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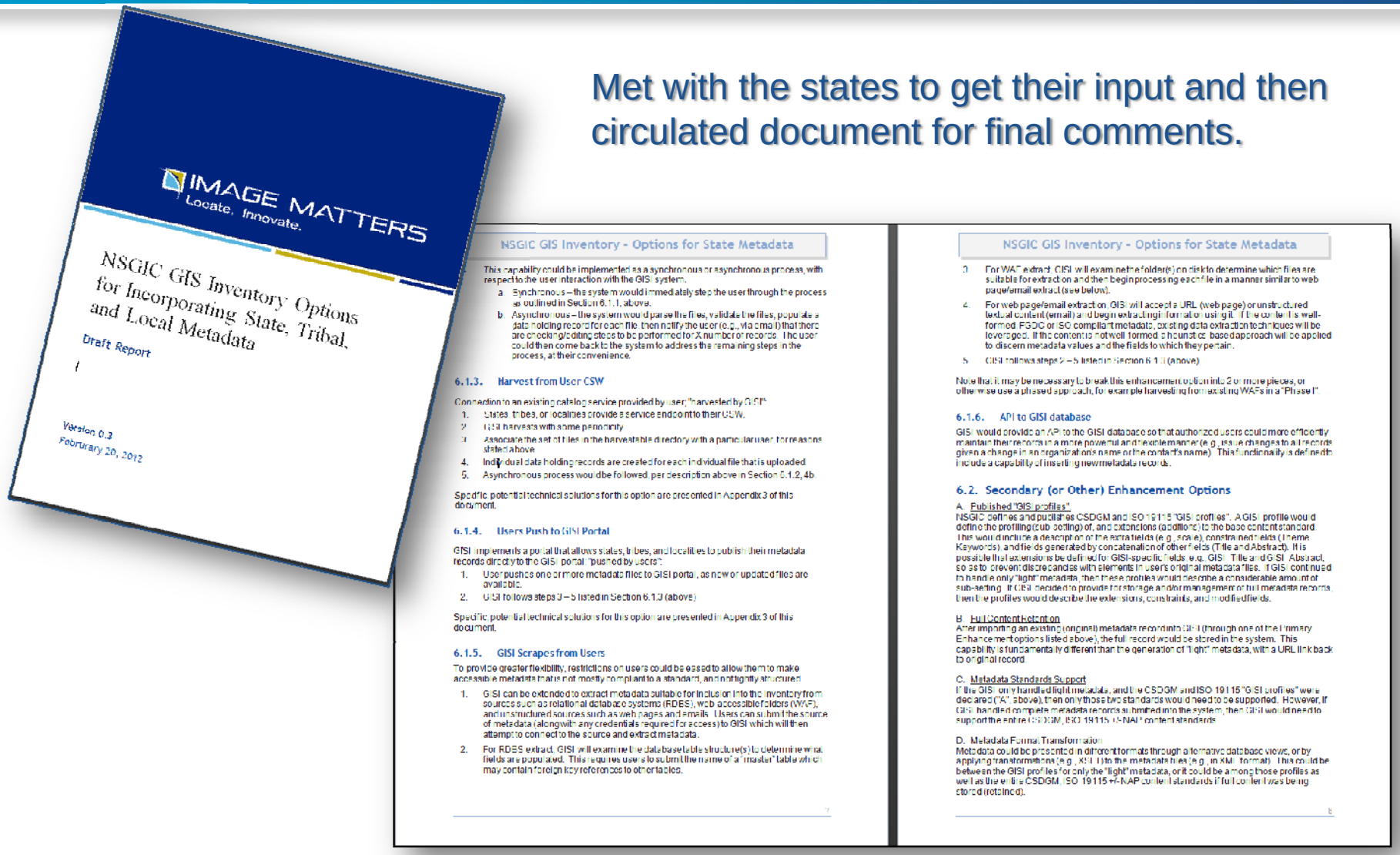
Completed Options – Now Costs



Met with the states to get their input and then circulated document for final comments.

Next Steps

- Build basic function to ingest and manage State Clearinghouse information by September
  - Ability to export this information in CSDGM and ISO formats
- Include an incremental approach that will allow us to build additional functions into the System as funding is available

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Questions ?

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