Who has the data?
Results of Maryland's 3-Week Statewide GIS Inventory Challenge

This is your state. This is your inventory.

Maryland's Need for GIS Inventory

- Maryland had no central repository for its wealth of geospatial information.

- Maryland lacked authoritative tracking and contact information.

- The Maryland State Geographic Information Committee (MSGIC) Executive committee chose NSGIC's Ramona as the best option.

What is Ramona?

- A free, national GIS inventory tool.

- Created by NSGIC to help **data producers** and **data consumers** by providing a consolidated search for GIS data created by multiple jurisdictions and agencies.

- Ramona allows others to learn about the data your agency creates and maintains.

What are Ramona's benefits?

1. Offers an up-to-date inventory by data layer.

2. Creates starter metadata.

3. Offers the ability to generate reports.

What are Ramona's Benefits?

4. Promotes statewide coordination.

5. Offers convenient search capabilities for GIS data, all in one place.

6. Provides the big picture.

7. Provides what one participating state calls an "online Rolodex of GIS data providers."

Maryland's Participation in Ramona

- Center for GIS at Towson University & MSGIC partnered on two campaigns to populate Ramona.

  - 3- Week GIS Inventory Challenge–February 2011
  - Geography Awareness Week Challenge– November 2011

Maryland's GIS Inventory Challenge

- Aggressive 3-week push to populate Ramona with a minimum of 7 framework layers

- Why the limited timeframe?
  - Funding deadline
  - Example of success set by Georgia's 6-week challenge

Framework Layers

The goal of the 3-week challenge was for agencies to list, at a minimum, the following framework layers in Ramona.

- <u>Boundaries</u>
  Cities/Towns/Municipalities; Counties; State

- <u>Elevation</u>
  Contours; DEM

- <u>Imagery/Base Maps/Earth Cover</u>
  Orthoimagery/Digital Orthophotography; Land Cover

- <u>Inland Waters</u>
  Hydrography; Watershed Boundaries

- <u>Location</u>
  Address Points; Geographic Place Names; Geodetic Control Points / Networks

- <u>Planning/Cadastral</u>
  Centroids/Vector Parcels

- <u>Transportation</u>
  Roads/Street Centerlines; Mass Transit Bus/Rail; Railroads
  Airports & Airfields

Maryland GIS Invento[ry]
Crucial Data Layer Refe[rence]

Use this reference guide to enter data layers into Ramona fo[r]
data, GIS-ready or not, for use in mapping systems, particula[rly]
in the datasets you create, maintain, or are planning to imp[lement]

Cadastral & Land Planning

- ❖ Cadastral Data
- ❖ Conservation Lands

Imagery, Base Maps & Land Cover

- ❖ Imagery

Elevation & Derived Products

- ❖ Bathymetric Contours

Transportation Networks

- ❖ Airport Runway and Taxiway
- ❖ Airport Terminals
- ❖ Airports and Airfields
- ❖ Bike Trails
- ❖ Bus Routes
- ❖ Bus Stops
- ❖ Cargo Loading Facilities
- ❖ Emergency and Evacuation Routes
- ❖ Ferry Routes
- ❖ Ferry Terminals
- ❖ Helicopter Landing Sites
- ❖ Hiking Trails
- ❖ Piers and Wharfs

Administrative & Political Boundaries

- ❖ 911 Call Center Service Area
- ❖ County Boundary
- ❖ Election Districts
- ❖ EMS Districts

- ❖ Voting Places
- ❖ Water and Sewer Districts and Facilities

Inland Water Resources

- ❖ Artificial Drainage
- ❖ Base Flood Elevations
- ❖ Channel Cross Sections
- ❖ Flood Control Structures

Facilities & Structures

- ❖ 911 Call Center Location
- ❖ Building Footprints
- ❖ Building Permits
- ❖ Chemical Production Plants
- ❖ Commercial Properties
- ❖ Data Processing Centers
- ❖ Day Care Centers
- ❖ Deep Injection Wells
- ❖ Detention Centers
- ❖ Elevation Certificates for Flood Prone Structures
- ❖ Emergency Mgmt Offices
- ❖ Emergency Shelters
- ❖ EMS Stations
- ❖ Evacuation Shelters
- ❖ Fire Stations
- ❖ Gathering Places for Large Crowds
- ❖ Government Facilities
- ❖ Government-leased Buildings
- ❖ Government-owned Buildings
- ❖ Hazardous Material Storage Facilities
- ❖ Hazardous Material Storage Sites
- ❖ Houses of Worship
- ❖ Ice Rinks
- ❖ Incinerator Hazardous Waste
- ❖ Incinerator Solid Waste
- ❖ Industrial Facilities

Cultural, Society & Demographics

- ❖ Daytime Populations
- ❖ Employment Densities
- ❖ Nighttime Populations
- ❖ 911 calls

Business & Economic

- ❖ ATM Locations
- ❖ Bank Facilities
- ❖ Bouillon Storage
- ❖ Federal Reserve Facilities

Utility & Communication Networks

- ❖ Cellular Phone Towers
- ❖ Coal Lease Areas
- ❖ Coal Mine Reclamation Sites
- ❖ Coal Mines (active)
- ❖ Electric Power Plants
- ❖ Electric Substations
- ❖ Electric Transmission Lines
- ❖ Fire Hydrants
- ❖ Fuel Processing Plants
- ❖ Gas Fields
- ❖ Gas Lease Areas
- ❖ Gas Pipelines
- ❖ Gas Processing Plants
- ❖ Gas Storage Facilities
- ❖ Gas Well Locations
- ❖ Hydro-Electric Facilities
- ❖ Irrigated Lands
- ❖ Irrigation Diversion Points
- ❖ Oil Fields
- ❖ Oil Lease Areas
- ❖ Oil Pipelines
- ❖ Oil Storage Facilities
- ❖ Oil Well Locations
- ❖ Outages - electricity
- ❖ Outages - water
- ❖ Outages - sewer
- ❖ Public Safety Transmitter Towers
- ❖ Public Water Supply Intakes
- ❖ Radio Stations
- ❖ Radio Transmitter Locations
- ❖ Refineries
- ❖ Reservoirs
- ❖ Satellite Ground Stations
- ❖ Septic Systems
- ❖ Sewerage Collection Lines
- ❖ Sewerage Pumping Stations
- ❖ Sewerage Treatment Plants
- ❖ Sludge Disposal Sites
- ❖ Surface Sludge Application Sites
- ❖ Telephone Exchange Areas
- ❖ Telephone Lines
- ❖ Telephone Switching Facilities
- ❖ Television Transmitter Locations
- ❖ Water Bottling Facilities
- ❖ Water Distribution Lines
- ❖ Water Districts
- ❖ Water Pipeline (Major)
- ❖ Water Pumping Stations
- ❖ Water Rights/Ownership
- ❖ Water Service Areas
- ❖ Water Tanks
- ❖ Water Towers
- ❖ Water Treatment Plants
- ❖ Water Well Locations
- ❖ Wellheads

Human Health & Disease

- ❖ Assisted Living Facilities
- ❖ Emission Facilities
- ❖ Hospitals
- ❖ Incinerator Medical Waste
- ❖ Monitoring Facilities
- ❖ Morgues
- ❖ Nursing Homes
- ❖ Pharmaceutical Plants
- ❖ Pharmacist's Home Locations
- ❖ Pharmacy Locations
- ❖ Public Health Dept. Locations
- ❖ Senior Living Facilities
- ❖ Urgent Care Facilities

Who Completed the Inventory?

- Data Producers
  - Local government organizations

  - Regional government organizations

  - State government organizations

  - Commercial providers

GIS Inventory Challenge Results

- **1,109** data layers registered to the State of Maryland

  - ❧426 state agency data layers

  - ❧14 private entity data layers

  - ❧2 regional group data layers

  - ❧1 federal agency data layer

  - ❧666 county data layers

How did we get that much cooperation?

- Compressed timeframe
    - Created a sense of urgency
- Communication and Outreach
    - Kept the challenge "in the news"
- Convenient online training
    - Proved Ramona's ease of use
- CGIS assistance
    - Helped with data entry
- Support from Governor's Office
    - Lent authority

February Declared GIS Inventory Month

Communication and Outreach

- Key point: Branding
  - Visual branding was essential
  - Adopted Ramona's branding and tagline
- Key Point: Messaging
  - Always upbeat and enthusiastic
  - Focused on each goal, each milestone
  - Sent according to a pre-planned schedule
  - Always included our offer to help

Communication and Outreach

- Developed a template & schedule for Constant Contact communications

- Prepared training PowerPoint and materials

- Conducted 3 training Webinars

- Sent press release announcing GIS Inventory month

- Created 1-page handout

- Delivered presentations

The Maryland GIS Inventory Challenge

We Need You!

The Inventory Challenge is a three-week effort sponsored by MSGIC to inventory Maryland's GIS data using Ramona, the nationwide GIS inventory tool.

Ramona helps data **producers** and **consumers** by allowing others to learn about the data your agency creates and maintains.

The MSGIC goal is to list, *at a minimum*, seven specific framework groups into Ramona by March 1, 2011.

Contact

Ashley Buzzeo
Chair, MSGIC Data & Resources Subcommittee
abuzzeo@towson.edu.

There are Nine Good Reasons for You to Participate.

Attend one of our Webinars to learn what they are, why Maryland and Ramona are a great fit, and how to get started.

Information Sessions

Wednesday, Feb 9 | 1:30 - 2:30pm
GoToWebinar Log-in
Phone: +1 (323) 417-4600
Access Code: 519-120-025

Thursday, Feb 10 | 10:00 - 11:00am
GoToWebinar Log-in
Phone: +1 (773) 945-1010
Access Code: 415-870-841

Thursday, Feb 10 | 3:00 - 4:00pm
GoToWebinar Log-in
Phone: +1 (323) 417-4600
Access Code: 589-254-737

Can't attend a Webinar?

Visit Ramona at gisinventory.net and click on Getting Started.

Click Here For More Information

The Maryland GIS Inventory Challenge
This is your state.
This is your inventory.

What is the GIS Inventory Challenge?

The GIS Inventory Challenge is Maryland's three-week effort to list the state's GIS inventory in Ramona. The Ramona GIS Inventory tool was created by the National States Geographic Information Council to help data producers and data consumers nationwide by providing a consolidated search for GIS data created by multiple jurisdictions and agencies. Ramona allows others to learn about the data your agency creates and maintains.

For More Information

Ashley Buzzeo
Chair, MSGIC Data &
Resources Subcommittee
abuzzeo@towson.edu

Be a leader in the GIS community by creating your account in the GIS Inventory! Start by visiting http://gisinventory.net

Why is Ramona important?

A national effort is underway to collect and share information about the government agencies that have data and whom to contact to obtain information about their data. The public safety arena has a particular need to know this information, especially during emergency events. Ramona was funded in part by grants from federal agencies as they recognized the need to catalogue data. The Federal Emergency Management Agency (FEMA) and other federal agencies currently rely on Ramona services and functionality.

What is the GIS Inventory Challenge goal?

The goal is for agencies to list, at a minimum, the following framework layers in Ramona by March 1, 2011.

Boundaries
- Cities/Towns/Municipalities
- Counties
- State

Elevation
- Contours
- DEM

Imagery/Base Maps/Earth Cover
- Orthoimagery/Digital Orthophotography
- Land Cover

Inland Waters
- Hydrography
- Watershed Boundaries

Location
- Address Points
- Geographic Place Names
- Geodetic Control Points / Networks

Planning/Cadastral
- Centroids/Vector Parcels

Transportation
- Roads/Street Centerlines
- Mass Transit – Bus/Rail
- Railroads
- Airports & Airfields

How much work will it take to list my data?

Not a lot! You can complete your inventory in two simple steps:

Step 1 – Create your profile
Step 2 – Inventory individual data layers

What are the nine good reasons I should participate?

1. Listing your inventory in Ramona connects you, both locally and nationally.
2. Listing your inventory in Ramona communicates our statewide progress and success.
3. Ramona offers an up-to-date inventory by data layer.
4. Ramona creates starter metadata.
5. Ramona offers the ability to generate reports.
6. The Maryland GIS Inventory Challenge promotes statewide coordination.
7. Ramona offers convenient search capabilities for GIS data throughout Maryland, all in one place.
8. Ramona provides the big picture.
9. Ramona provides what one participating state calls an "online rolodex of GIS data providers."

The Maryland G[IS]

GIS Inventory Update

On behalf of MSGIC and the State[...]
Maryland GIS Inventory Challenge[...]

2 ½ weeks into the challenge, the[...]
entered into the Ramona system![...]

- County - 314
- State - 128
- MD iMap Map Services - 192
- Other (private, national) - 15

Your time and commitment to this[...]
more critical now than ever before[...]
on 2/14, the Governor's Office and[...]
expect agencies and counties to li[...]
creating situational awareness dur[...]

Please try to set aside some time[...]
jurisdiction into the Ramona syste[...]
next status map on March 1st.

Maryland GIS Inventory Challenge: County Participation
Status Update as of February 23, 2011 12pm

Participation
- No participation yet
- Profile created, no data yet
- Profile created, data entered
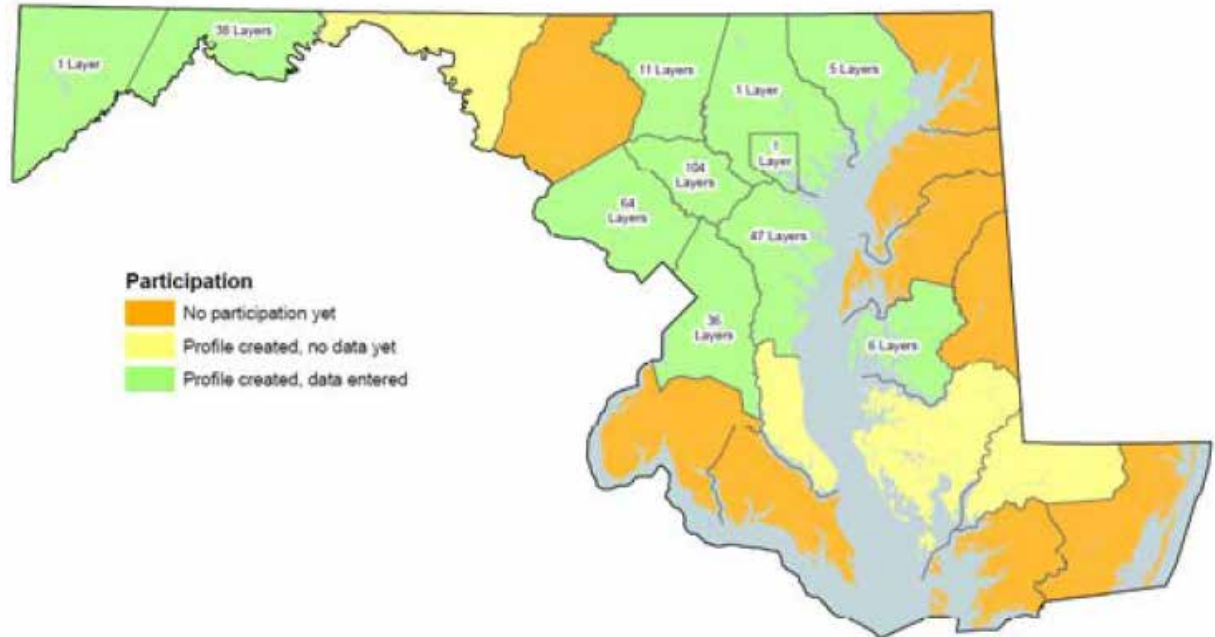
Please feel free to contact me at abuzzeo@towson.edu, 410-704-2081, or 410-704-3887.

Visit Ramona at http://gisinventory.net/

GIS INVENTORY

The Ramona GIS Inventory is a service of the National States Geographic Information Council (NSGIC)

The Maryland GIS Inventory Challenge

GIS Inventory Update

The Maryland GIS Inventory 3-week Challenge is officially over! On behalf of MSGIC and the State of Maryland, I want to thank you for participating, and/or for using the system. I am pleased to provide you with a summary of the work we accomplished together during this important initiative.

There are now a total of **1,109** data layers in Maryland entered into the Ramona system!

- County - 666
- State/Regional - 236
- MD iMap Map Services - 192
- Other (private, national) - 15

County Participation (as of 3/1/2011)

Maryland GIS Inventory Challenge: County Participation
Status Update as of March 1, 2011 at Noon

Participation
- No participation yet
- Profile created, no data yet
- Profile created, data entered
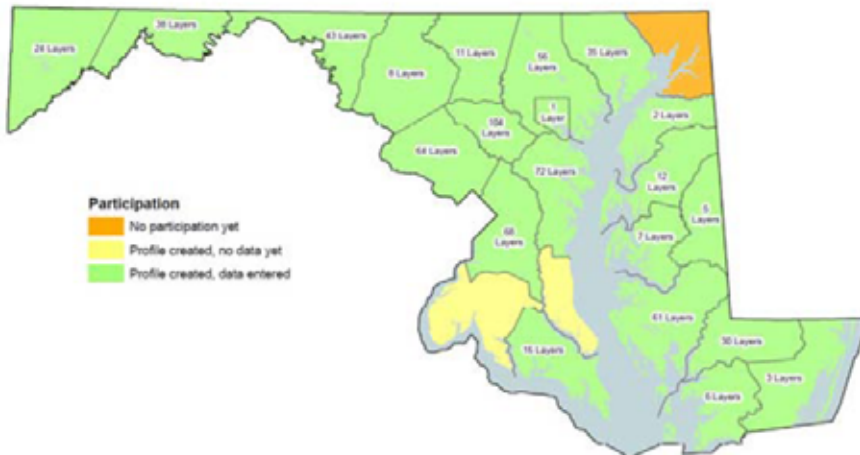
State/Regional Participation (as of 3/1/2011)

- Baltimore Metropolitan Council
- Eastern Shore Regional GIS Cooperative
- Maryland Department of Business and Economic Development
- Maryland Department of Housing and Community Development
- Maryland Department of Mental Health and Hygiene
- Maryland Department of Natural Resources
- Maryland Department of Planning
- Maryland Emergency Management Agency
- Maryland Historical Trust
- Maryland Ports Administration
- Maryland State Highway Administration
- Maryland Transit Administration
- Maryland Transportation Authority
- Maryland Transit Administration Police Force
- Metropolitan Washington Council of Governments
- Towson University Center for GIS

Going forward, efforts will continue to populate Ramona with as many data layers from as many data producers as possible. I encourage you to continue to input ALL of your data layers and also to begin using the system to discover data in the State of Maryland.

Stay tuned for more updates on progress throughout the coming months, and be sure to attend the presentation at TUgis this year on Maryland's GIS Inventory.

Visit Ramona at http://gisinventory.net/

Geography Awareness Week Challenge

- Conducted a 1-week county framework challenge

- Why the limited timeframe & data collection?
  - Counties maintain most of the framework layers
  - Close the gap from the first data challenge
  - Towson University geography student seeking 3-credit internship (120 hours)
  - Integrated with GIS Day and Geography Awareness Week

Communication and Outreach

- Formal presentation at MSGIC Executive Committee
- Obtained offer of support from State GIO
- Crafted message to counties from State GIO
  - State GIO personalized the message and sent it
  - Lent authority to the project
  - Formally introduced the CGIS intern as the project lead
- CGIS intern followed up individually with each county GIS manager
  - Provided, gap analysis results, next steps, and offer of assistance

Timeline

MSGIC Executive Meeting- October 12

MSGIC Quarterly- October 19

Geography Awareness Week- November 13-19

GIS Inventory Month- February

Geography Awareness Week Challenge Results

- **1,364** data layers registered to the State of Maryland
- Total number of data layers added: 186
  - Total number of framework layers added: 95
    - 18.8% increase

Framework Layers Entered in Ramona (n=504)	Total	Percent
Prior to November 2011	158	31.30%
After November 2011	253	50.20%
*Total Frameworks Accounted For	333	66.10%

	Allegany	Anne Arundel	Baltimore City	Baltimore County	Calvert	Caroline	Carroll	Cecil	Charles	Dorchester	Frederick	Garrett
Cities/Towns/Villages		●	●				●			●		●
Counties/Parishes	●	●		●			●				●	●
Contours	●	●	●	●			●		●	●	●	●
DEM	●	●					●					
Digital Orthophotography	●	●		●	●	●	●	●	●	●	●	●
Land Cover		●										
Hydrography	●	●	●	●			●				●	
Watershed Boundaries		●		●								
Address Points	●	●		●			●			●	●	●
Geodetic Control Points		●					●					
Geodetic Networks												
Geographic Place Names	●	●										
Parcel/Cadastral/Land Ownership	●	●		●			●			●	●	●
Airports & Airfields		●										
Bus Routes	●											
Bus Stops	●											
Light Rail & Subway Lines				●								
Light Rail & Subway Stations				●								
Railroad Lines	●	●	●	●			●			●	●	●
Railroad Terminals/Stations												
Roads/Street Centerlines		●	●	●			●		●	●	●	●
Total frameworks participated	11	15	5	11	1	1	11	1	3	7	8	8

	Harford	Howard	Kent	Montgomery	Prince George's	Queen Anne's	Somerset	St. Mary's	Talbot	Washington	Wicomico	Worcester
Cities/Towns/Villages	●	●		●	●				●	●	●	
Counties/Parishes		●		●				●	●			
Contours	●	●			●	●			●	●	●	
DEM	●			●	●							
Digital Orthophotography		●		●	●	●	●	●	●	●	●	●
Land Cover										●		
Hydrography		●		●	●	●			●	●		
Watershed Boundaries		●		●								
Address Points		●			●	●			●	●	●	
Geodetic Control Points		●								●		
Geodetic Networks												
Geographic Place Names				●	●							
Parcel/Cadastral/Land Ownership		●	●		●	●	●				●	
Airports & Airfields		●										
Bus Routes		●		●	●							
Bus Stops		●			●							
Light Rail & Subway Lines				●								
Light Rail & Subway Stations				●								
Railroad Lines		●								●		
Railroad Terminals/Stations												
Roads/Street Centerlines	●	●		●	●	●	●	●	●	●	●	
Total frameworks participated	4	14	1	11	11	6	3	4	6	9	6	1

	Allegany	Anne Arundel	Baltimore City	Baltimore County	Calvert	Caroline	Carroll	Cecil	Charles	Dorchester	Frederick	Garrett
Cities/Towns/Villages		●	●		●	●	●	●		●	●	●
Counties/Parishes	●	●		●		●	●	●		●	●	●
Contours	●	●	●	●	●	●	●		●	●	●	●
DEM	●	●		●	●		●				●	
Digital Orthophotography	●	●		●	●	●	●	●	●	●	●	●
Land Cover		●				●				●		
Hydrography	●	●	●	●	●	●	●	●		●	●	
Watershed Boundaries		●		●		●	●	●		●	●	
Address Points	●	●		●	●	●	●	●		●	●	●
Geodetic Control Points		●		●	●		●			●	●	
Geodetic Networks		●										
Geographic Place Names	●	●			●					●		
Parcel/Cadastral/Land Ownership	●	●		●	●	●	●	●		●	●	●
Airports & Airfields		●		●			●			●	●	
Bus Routes	●	●			●		●				●	
Bus Stops	●	●			●		●				●	
Light Rail & Subway Lines		●	●	●								
Light Rail & Subway Stations		●	●	●								
Railroad Lines	●	●	●	●			●	●		●	●	●
Railroad Terminals/Stations		●	●	●							●	
Roads/Street Centerlines		●	●	●	●	●	●	●	●	●	●	●
Total frameworks	11	21	8	15	12	10	15	9	16	14	16	8

	Harford	Howard	Kent	Montgomery	Prince George's	Queen Anne's	Somerset	St. Mary's	Talbot	Washington	Wicomico	Worcester
Cities/Towns/Villages	●	●		●	●			●		●	●	
Counties/Parishes	●	●		●	●			●	●			
Contours	●	●			●	●			●	●	●	
DEM	●			●	●					●		
Digital Orthophotography	●	●		●	●	●	●	●	●	●	●	●
Land Cover	●				●					●		
Hydrography	●	●		●	●	●			●			
Watershed Boundaries	●	●		●	●							
Address Points	●	●			●	●			●	●	●	
Geodetic Control Points	●	●			●					●		
Geodetic Networks	●				●							
Geographic Place Names				●	●							
Parcel/Cadastral/Land Ownership	●	●	●		●	●	●			●	●	
Airports & Airfields	●	●		●	●					●		
Bus Routes	●	●		●	●					●		
Bus Stops	●	●		●						●		
Light Rail & Subway Lines	●			●	●							
Light Rail & Subway Stations	●			●	●							
Railroad Lines	●	●		●	●					●		
Railroad Terminals/Stations	●			●	●							
Roads/Street Centerlines	●	●		●	●	●	●	●	●	●	●	
Total frameworks	20	14	4	15	21	12	3	4	6	14	6	1

Next Steps

- Conduct next 3-week challenge during GIS Inventory Month (February)

- Hire an intern as project lead

- Build on previous communication and outreach

- Focus more energy on non-participants

- Determine a way for Ramona to ingest existing metadata

Lessons Learned

- Verify that you are contacting the "yes" person

- Persistence

  – Messaging and persistent, polite follow-up are essential

- Official support is essential

Contact

Ashley Buzzeo
Project Manager
abuzzeo@towson.edu
410-704-2081

Susan Wooden
Manager of Writing, Editing, and Technical
Communications
swooden@towson.edu
410-704-5297

Early Adopters

Dewberry

- *Private Industry: Chris Holub, Dewberry*

  – Ramona helps to optimize our data mining process in the proposal stage by allowing a one-stop portal for the data that we are looking for.

  – It helps to avoid wasted phone calls and emails to the wrong people when looking for data, saving time, money, and frustration for both parties.

  – We will know that we are getting the most up to date data directly from the proper source, the first time we look for it.

Early Adopters

Howard County
M A R Y L A N D

- *County Government: Rob Slivinsky, Howard County*

  – Easy to use and create records
  – A comprehensive data discovery tool for data seekers
  – A tool I can use and send to users asking about my datasets
  – A great place to start documenting your data even if you do not have metadata
  – NSGIC is government based organization

Early Adopters

- *Federal Government: William Burgess, NSGIC*

  - FEMA's Map Modernization Program –staff have administrative privileges in the system to aid them in locating base imagery and elevation models for map production.
  - The National Digital Orthophoto Programs Committee has access to the orthoimagery information in Ramona.
  - The National Digital Elevation Data Program Committee has access to the elevation information in Ramona.
  - All Federal agencies use the Geospatial One Stop Portal to locate geospatial data.
  - USGS staff have used Ramona to form orthoimagery production partnerships with end-of-year funds that they needed to quickly encumber.