What is Metadata?

Simply put, metadata is information about your data – it is your data documentation, not your actual spatial data. Metadata serves as a searchable reference of information associated with your spatial data.

Who should enter/create and maintain Metadata?

- Local governments
- State and federal agencies
- Private sector entities
- Other geospatial data developers

Individuals creating or editing spatial data should also know how to create metadata. Managers should support metadata development.

Why should your organization be interested in Metadata?

- To minimize liability
- To locate data that you do not have
- To describe the accuracy of your data
- To protect your data investment
- To understand the most appropriate uses for the data

Creating and Maintaining Metadata

1. Create metadata at the same time you enter your spatial data (concurrently).

   a. Should at least answer these questions: who, what, where, when, why, and how

2. Use a metadata entry tool.

   a. Stand-alone tools:

      i. 3 Tab, *http://gis.cdatribe-nsn.gov/ThreeTabMetadataEditor/*

      ii. Tkme, *http://geology.usgs.gov/tools/metadata/tools/doc/tkme.html*

      iii. FGDC Metadata Tool Listing, http://www.fgdc.gov/metadata/geospatial-metadata-tools

   b. Software-dependent tools

      i. NOAA CSC ArcView® Metadata Collector v2.0 Extension, *http://www.csc.noaa.gov/metadata/download.html*

      ii. ESRI ArcGIS metadata tool (ArcCatalog)

3. Export your metadata to an XML, text, or SGML format.

4. Remember to update and maintain your data!

Publishing your Metadata

Your metadata is now ready for others to use! A great place to put it is on the Internet so other users can find it!

If you are a Virginia government or Virginia higher education user, you can post your metadata to the Virginia Metadata Clearinghouse. Here's how:
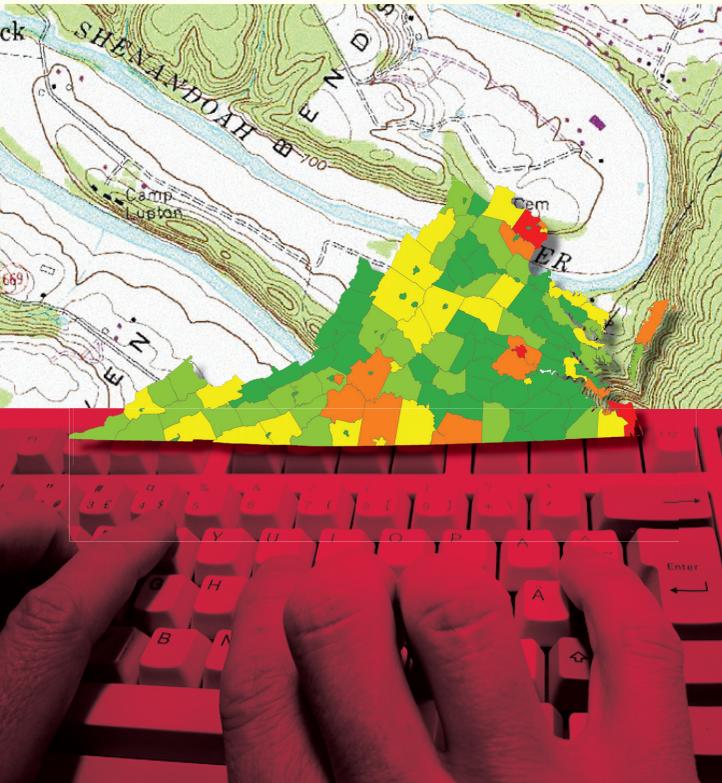
1. Access the Virginia Metadata Clearinghouse at *http://gisdata.virginia.gov*.

2. Create an account and request Publisher status from the clearinghouse administrator.

3. Upload your metadata.

4. Update and maintain your metadata! (Can be done on the Clearinghouse.)

5. Your metadata is now searchable from across the globe!

6. Contact the Virginia Geospatial Extension Program if you would like to host a metadata creator's workshop!

Virginia Metadata and GIS links can be found at: *http://www.cnr.vt.edu/gep/metadata_res.html*.
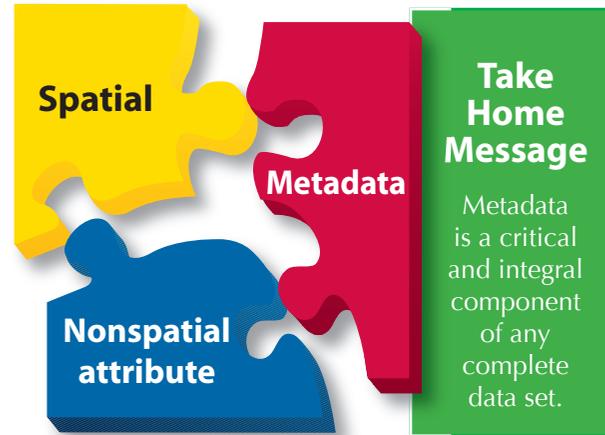
How can it benefit your organization?

Metadata has numerous benefits. Here are just a few…

- Internal Value:
  - Declares the data limitations and appropriate use (limits liability)
  - Data insurance policy (critical data asset protection)
  - Knowledge stays with the data as personnel change (inheritance)
  - Prevents data duplication (catalogs)

- External Value (using metadata within your organization adds value to your data for external users):
  - Finding the data (data discovery)
  - Assessing the value of data (assessment)
  - How you find the data (access)
  - Appropriate data use (use)

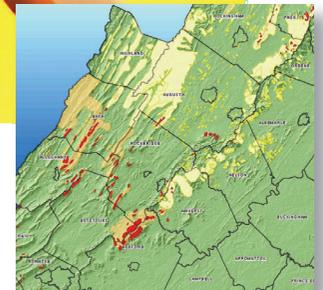Never treat metadata as a separate entity; it provides vital information about a data set.

Spatial

Nonspatial attribute

Metadata

Take Home Message

Metadata is a critical and integral component of any complete data set.

Summary

- You can share metadata with others, without sharing your spatial data assets.

- Metadata can save you time (whether you are on the "giving" or the "receiving" end).

- Metadata has always been important, HOWEVER, it is increasingly necessary as we share more data instantaneously through server-based solutions, etc.

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Mind over Metadata

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