### Lesson 7: Metadata



View all Education Modules at https://www.dataone.org/education-modules (CC)

#### **Defintion: Metadata**

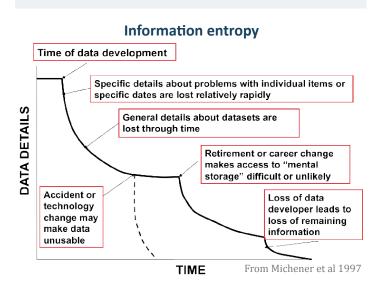
Metadata is documentation about the data. It describes the content, quality, condition, and other characteristics of a dataset. Metadata allows data to be discovered, accessed, and reused.

# What do you want others to know about data you PROVIDE to them?

## What do you want to know about data you RECEIVE from others?

- Why were the data created?
- What limitations do the data have?
- What does the data mean?
- What are the gaps in the data?
- What processes were used in data creation?
- Is there a fee for the data?
- What do the values in the tables mean?
- What software is needed to read the data?
- What projection was used for GIS data?
- Can these data be given to someone else?
- How should the data be cited?

#### Creating robust metadata is in your OWN best interest!



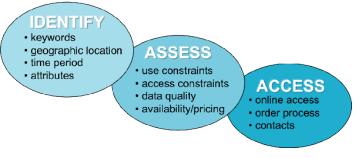
#### Metadata standards

Metadata standards use common terms, definitions, and structure to provide consistency to data documentation.

Standards and tools vary. Select yours according to your data type, guidance from your organization, and your available resources.

The value of metadata	
To Creators	<ul><li> avoid duplication</li><li> share reliable information</li><li> promote contributions to field</li></ul>
To Users	<ul> <li>easier to find data</li> <li>easier to evaluate data content and applicability</li> <li>provides info on how to acquire, process, and use data</li> </ul>
To Organizations	<ul> <li>ensures investment in data by allowing later reuse for other purposes</li> <li>transcends people and time to offer data permanence and create institutional memory</li> <li>advertises research</li> </ul>

#### Metadata for data discovery



#### Metadata uses

- **Data distribution**, including discovery (see above), publication, and data portals
- **Data management**, including maintenance and updating, accountability, liability, and discovery and reuse
- **Project management**, including project planning, monitoring, coordination, and deliverables

#### Local contact information