GIS II: Data Management
Getting Started with Metadata Exercise

*** Files needed for exercise: HC_combo.shp

Goals: The goal for this exercise is to examine metadata as an item description in ArcMap to assess the quality, provenance, and use constraints of a dataset. You will also learn how to use the ArcCatalog to edit metadata.

Skills: After completing this exercise, you will be familiar with examining and editing metadata.

Viewing an Item Description
1. Open a new blank map in ArcMap.
2. Click on the Add Data button, browse to the Getting Started with Metadata Exercise_Data folder, and add the file HC_combo.shp.
3. What can you tell about this shapefile by its geometry? What can you tell about this shapefile from its attribute table?
4. To better understand this dataset, take a look at its Item Description. Right click the HC_combo layer in the Table of Contents and select Data > View Item Description. The Data Source Item Description window opens and displays the item's metadata.
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5. What information is provided for the dataset in the item description? You will see it contains a brief summary, a more detailed description, credits, use limitations, extent, and scale range. The default Item Description style can be considered minimalist in the amount of information it provides. In many cases the item description style may be adequate; however if you are sharing data with regular GIS users, metadata styles with more information and a formal structure may be desired. We can change the metadata style to view more or different information about the item.

6. Close the Item Description window.

Changing the Metadata Style

1. You can change the style of metadata in ArcMap or ArcCatalog. On the main toolbar, go to Customize > ArcMap Options and select the Metadata tab.

2. In this case, you should select North American Profile of ISO19115 2003 as your style.

This is the North American Profile of the International Organization for Standardization’s (ISO) standard number 19115. This new standard is replacing the former Federal Geospatial
3. Keep "Automatically update metadata when viewed" checked. When this option is checked, ArcGIS retrieves the item’s properties and records them in the appropriate metadata elements. As part of this operation, some metadata is created if it doesn’t already exist. This could include information such as coordinate system, extent, scale, feature count, and field information. This process is known as synchronization—values in the metadata are being synchronized with the properties of the item. Click OK.

4. Now take a look again at the description for your data. Right click the layer, select Data > View Item Description. You should see two new items at the bottom of the Data Source Item Description window: ArcGIS Metadata and FGDC Metadata. You can expand each by clicking on the triangle to the right. ArcGIS metadata is Esri’s form of metadata that contains content for all metadata standards. FGDC metadata is being replaced with new standards so it is not editable.

5. Answer the following questions by exploring both the ArcGIS and FGDC metadata styles:
   a. Who can you contact with questions about this dataset?
   b. What is the edition date for the dataset?
   c. How often is this dataset updated?
   d. What are the use legal constraints of this dataset?
   e. What is the coordinate system of this dataset?
   f. What value does the attribute field SALES_VOL represent?

This information is valuable and can be tracked, maintained, and shared with collaborators and consumers. Next, you will learn to edit this information.

6. Close the Item Description window when you are finished exploring the metadata.