

1 **DATA MAPPING COMPUTER TRAINING**

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NSDC DATA USER CONFERENCE

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2 **DATA MAPPING APPLICATIONS**

We are going to explore three free, web-based applications for creating thematic (choropleth) maps.

- American FactFinder
- ArcGIS Online
- Google Fusion Tables

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American FactFinder is a product from the U.S. Census Bureau. One feature of American FactFinder is the ability to see geographic patterns in data by viewing the data on a map.

Limitations: Can only map data found in American FactFinder. Cannot upload other data. Unfriendly printing capability.

4 **Steps to create a map in American FactFinder**

- Select a table with the data you want to map
- Click Create a Map
- Select cell with data
- Click Show Map
- Manipulate the map with zoom, changing symbology, boundaries and features

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www.census.gov

6 **Exercise 1 - Percent of population 25 years and over with a Bachelor's degree or higher for Nebraska counties**

- Create a basic map
- Change transparency
- Change color and data classes
- Printing options

7 **Exercise 2 – Population below poverty for Douglas County census tracts**

- Sticky settings
- Select boundaries and features
- Legend
- Change the geography of a map

- 8 **ArcGIS Online is a collaborative, cloud-based platform that lets members of an organization create, share, and access maps, applications, and data.**

Advantages are that it has a lot of preloaded data layers available and the ability to upload data.

Limitations: Must create an account in order to save, share or print a map. User must have access to shapefiles and capability to edit .dbf files. No user defined classes. Symbology and other map manipulation is limited. Unfriendly printing capability.

- 9 **Steps to create a map in ArcGIS Online**

- Choose an area
- Choose a basemap
- Add data layers on top of basemap
- Add additional features
- Change the symbology

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www.arcgis.com/home/

- 11 **Exercise 3 – Nebraska counties**

- Make a map feature
- Menus
- Basemap options
- Search for layers
- Add layers
- Access the features of content menu

- 12 **Preparing files to use with ArcGIS Online**

- Commons formats are data files in .csv and shapefiles in .zip folders
- To create thematic maps you must add a shapefile; these can be downloaded from www.census.gov
- It is best to merge your data with the .dbf file of the shapefile before importing

- 13 **Exercise 4 – Number of Keno licenses per 100 population for Nebraska counties in 2011**

- Import layers
- Change symbology
- Change attributes
- Change name of layer
- View data

- 14 **Google Fusion Tables is an experimental data visualization web application to gather, visualize, and share larger data tables.**

It works best in Chrome.

Limitations: Must have a google account. User must have access to .kml files. There is no label capability.

15 **Steps to create a map in Google Fusion Tables**

- Upload data and geometry files
- Merge the files
- Change the symbology and layout of the map
- Share

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www.google.com

17 **Preparing files to use with Fusion Tables**

- Generally requires two files with a common field used to merge the files (can have different fields names but content must be exactly the same)
- Common formats are data files in .csv and geometry files in .kml
- Some kml files are available at www.census.gov; or simply convert .shp file to .kml using converter

18 **Exercise 5 – Median age for census tracts in Lancaster county for 2010**

- Import tables
- Determine merge fields
- Merge files
- Add map
- Change map styles
- Add legend
- Share and publish map

19 **OTHER MAPPING APPLICATIONS AND RESOURCES**

This training focused on free, web-based applications for thematic mapping.
Please see the handout for a list of other applications, resources and recommended reading.

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