Workshop on Korean Data Services: GIS

Justin Joque
Visualization Librarian
joque@umich.edu
Where do you live?

http://tinyurl.com/koreagis
What is GIS?

- Stands for Geographic Information Systems
- Software for:
  - Making maps
  - Organizing geospatial information
  - Analyzing geospatial information

N.B. GIS is different than GPS (Global Positioning System)
GIS Options

- Desktop GIS
  - ArcGIS
  - QGIS

- Cloud GIS
  - ESRI (including story maps)
  - Carto
  - MapBox

- Other
  - R
  - PostGIS
### Values

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<th>Name</th>
<th>Count</th>
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<tr>
<td>3</td>
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<td>2</td>
</tr>
<tr>
<td>4</td>
<td>Water</td>
<td>4</td>
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</tbody>
</table>

### FiD# Names

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<tbody>
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<td>State</td>
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<td>3</td>
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<tr>
<td>4</td>
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<td>1</td>
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<td>Warner</td>
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</tbody>
</table>
GIS Data Types

- Common Formats:
  - File Geodatabase - ESRI's geodatabase format, stored as folders in a file system.
  - Shapefile - ESRI's open, hybrid vector data format using SHP, SHX and DBF files
  - GeoJSON - open format for describing spatial data as JSON
  - Text file - often csv (comma separated value) containing latitude and longitude
Carto

- Web based GIS
- Free and paid versions
- Easy to use
- Somewhat limited analysis options

http://tinyurl.com/koreagis2
Associating attribute data with spatial data
**Visualizing**
- Beginner
- Descriptive statistics
- Thematic map
- Where is, trends

**Analyzing**
- Advanced
- Spatial statistics
- Density Map
- Why is, pattern, change

**Display**
- organize

**Analyze**
Projections

- Mercator
- Sinusoidal
- Plane Chart
- Transverse Mercator
- Equatorial Stereographic
- Equirectangular
- Nicolosi
- Cassini
- Bonne
- Oval

Reality?
Korean Data Sources (Thanks to Jungwon)

- **Statistics Korea**
  - The national statistical service for Korea - this site contains a wealth of information on the province level.

- **Korean Statistical Information Service (KOSIS)**
  - Provide statistics about population, household income and expenditure, employment, labor, agriculture, transportation, economy, finance, education and trade. English version.

- **Korean Social Science Data Archive (KOSSDA, 한국사회과학자료원)**
  - Provide qualitative and quantitative data related to public opinion, politics, government, law, economy, business, society, welfare, education, and regional studies.

- **Open Data Portal**
  - Provide open data of Korean government related to education, land use, administration, finance, welfare, labor, health, tourism, safety, and more.

- [http://guides.lib.umich.edu/koreadata](http://guides.lib.umich.edu/koreadata)
Thank you!

Questions?