Intro to GeoJSON

Patrick McKinney

GIS Specialist @ Cumberland County

President @ PAMAGIC

pmckinney@ccpa.net

https://pmacmaps.github.io/

Topics We'll Cover

➢ Review common ways to share geographic data on the web/internet

➢ Introduce JSON

➢ Introduce GeoJSON

➢ Demo of GeoJSON in a web map

Geo Data on the Web

➢ Esri services

➢ OGC services

➢ GeoJSON

➢ KML

➢ ...

Esri Services

- ➤ Map Service
- ➤ Feature Service
- ➤ Image Service
- ➤ Geocode Service
- ➤ Geoprocessing Service

Open Geospatial Consortium

- International organization that makes open standards for global geospatial community
- Web Map Service
- Web Map Tile Service
- Web Feature Service
- Web Processing Service

JSON

- ➤ JavaScript Object Notation
- ➤ Lightweight data-interchange format
- ➤ Easy for humans to read and write
- ➤ Easy for machines to parse and generate
- ➤ Based on a subset of the JavaScript language

JSON Example

- Harrisburg Sites & Parks JSON file

- JSON can be used to generate content for websites

- Create content from JSON demo

GeoJSON

➢ Geographic version of JSON

➢ May represent a geometry, a feature, or a collection of features

➢ supports Point, LineString, Polygon, MultiPoint, MultiLineString, MultiPolygon, and GeometryCollection

➢ Features contain a geometry object and additional properties

GeoJSON Example

- [Harrisburg Sites & Parks](#) GeoJSON file
- GeoJSON can be used as a data source for web maps
- [GeoJSON web map demo](#)

Resources

- [GeoJSON Specification](#)
- [GeoJSON/JSON formatter](#)
- [JSON](#)
- [Open Geospatial Consortium](#)
- [ArcGIS Services](#)
- [Leaflet.js (web mapping library)](#)