

Data Interoperability Extension: Import and Export GeoJSON

ArcGIS 10.2, 10.3

Welcome to the Essential ArcGIS Task Sheet Series. This series supplements the Iowa State University GIS Geospatial Technology Training Program short course series, "Essential ArcGIS Tutorial Series." The task sheets are designed to provide quick, easy instructions for performing specific tasks in GIS.

The Data Interoperability extension tool, Quick Import, converts any data source supported by the Data Interoperability extension (<http://www.esri.com/software/arcgis/extensions/datainteroperability/supported-formats>) and loads it into a geodatabase. The Quick Export tool converts geodatabase feature classes or feature layers to any external dataset supported by the Data Interoperability extension. This task sheet will cover how to import and export GeoJSON data using the Data Interoperability extension tools for ArcGIS and will show you how to test the exported GeoJSON file using geojson.io.

1. Download the Data

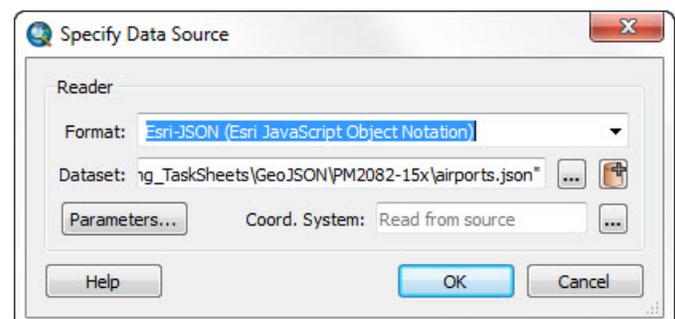
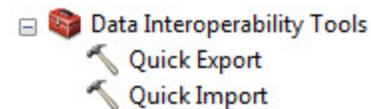
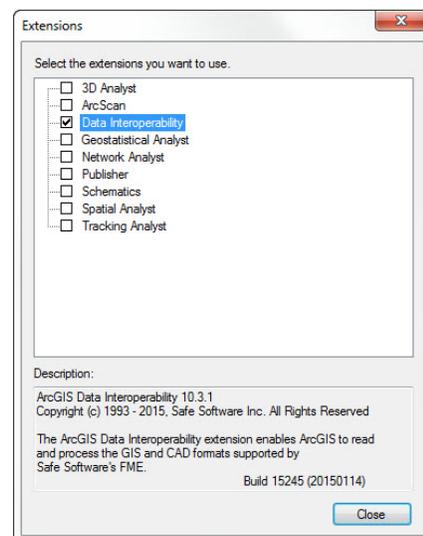
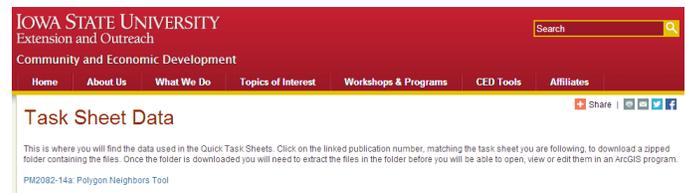
- To download the data used in this task sheet, navigate to www.extension.iastate.edu/communities/gis/quicktasksheets/data in a web browser. Click on the publication number that matches this task sheet. In this case, the publication number is **PM2082-15x**. The data for this task sheet originates from the NRGIS and can also be found at: <https://programs.iowadnr.gov/nrgislibx/>
- When the download is complete, you will need to unzip the folder in order to access the files in ArcGIS. The folder contains a county shapefile and airport locations as a GeoJSON file.

2. Enable the Data Interoperability Extension

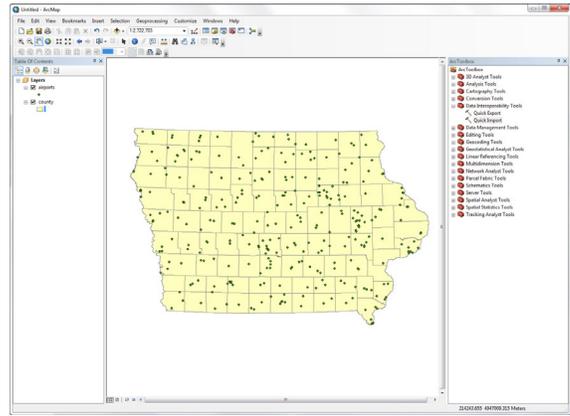
- In a blank ArcMap document, click **Customize** and select **Extension** from the drop-down menu. In the **Extensions** window, check **Data Interoperability** and click **Close**.
- Add the **county** shapefile, provided in the data download to the blank ArcMap document.

3. Import GeoJSON

- Open **ArcToolbox** and find the **Data Interoperability Tools** toolbox. Within the toolbox you will find two tools, **Quick Export** and **Quick Import**.
- Open the **Quick Import** tool, and select **airports.json** as the **Input Dataset**. Make sure **Format** is set as **GeoJSON (Geographic JavaScript Object Notation)** and click **OK**. *Hint: you may need to select More Formats from the drop-down menu to find this format option.*

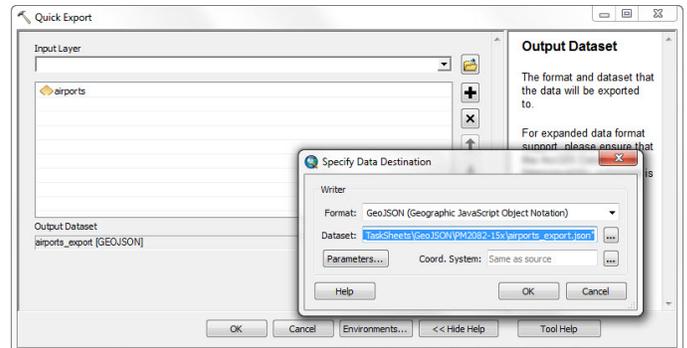


- c. Keep the **Output Staging Geodatabase** set to the default and click **OK**. *Hint: when the import is complete and the layer isn't added to your ArcMap document automatically, click Add Data, click the home icon and you should see a geodatabase named airports in the home folder.*



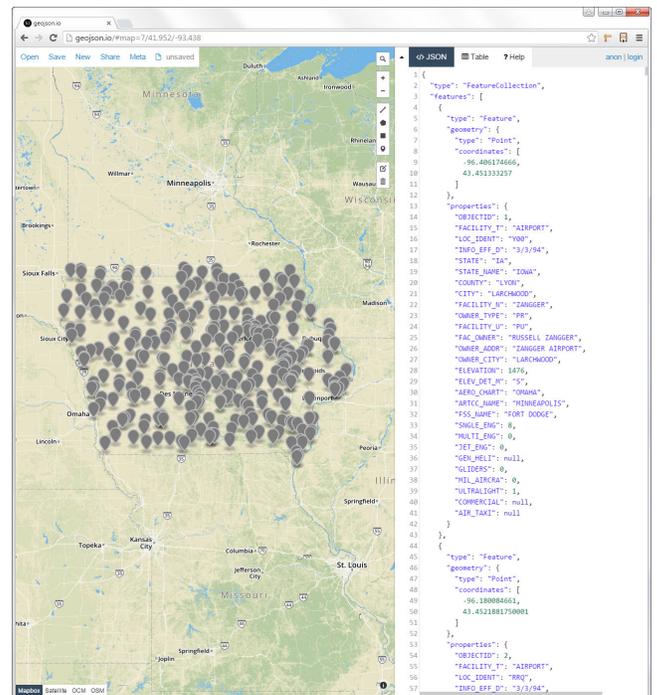
4. Export GeoJSON

- a. Open the **Quick Export** tool in the **Data Interoperability Tools** toolbox.
- b. Select **airports** as the **Input Layer** and set the **Output Dataset Format** to **GeoJSON (Geographic JavaScript Object Notation)**. Select the appropriate output location and name the file **airports_export.json**.



5. Test GeoJSON Export with geojson.io

- a. When the GeoJSON export is complete navigate to geojson.io in your web browser. You will use this website to validate the GeoJSON file.
- b. Click and drag the **airports_export.json** file into the map area of the geojson.io web-page. If the file contains valid GeoJSON data, all the airport features will appear on the web map.
- c. You will be able to view the **airports_export.json** data in GeoJSON format, as you see in the image on the right, or in a table format like you would see the data in an attribute table.
- d. From the geojson.io interface you can add additional markers or edit existing ones, and add lines or polygons to the map.
- e. When your map is complete you are able to save it using your GitHub account (optional) and share the map URL with others.
- f. To learn more about the tools and features available on the geojson.io page, read the help information found at the top of the page.



Contact:

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Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, in cooperation with the US Department of Agriculture. Cathann Kress, director, Cooperative Extension Service, Iowa State University of Science and Technology, Ames, Iowa.