

1 Service Area Map File Upload Criteria

Georgia 811 offers its members the ability to upload a geoson of their service area. The file must meet the following criteria:

- The file must be of the **GEOJSON** format (not shapefile).
- The file must contain **ONLY** geometries that are either a **POLYGON** or **MULTIPOLYGON**.
- The file must not contain any **POINT** or **LINestring** features.
- The file must not contain any **GEOMETRY COLLECTION** features.
- The file must have coordinates in the **EPSG:4326** projection. (This is sometimes called **LL84** using **WGS84**).
- The file must be wholly contained within a buffer of 200 feet around of the state of Georgia.
- The file must be less than 12MB in size.
- The file must contain less than 300,000 coordinates and contain at least four coordinates.
- The geometry must be **OGC Valid** (not just **ESRI Valid**).
- The geometry must be **OGC Simple**.
- The geometry must contain **No Self-Intersections**.
- The geometry must contain **No Holes** outside its shell.
- The geometry must contain **No Nested Holes**.
- The geometry must contain **No Disconnected Interiors**.
- The geometry must contain **No Ring Self Intersections**.
- The geometry must contain **No Nested Shells**.
- The geometry must contain **No Duplicated Rings**.
- The geometry must contain only **Valid Coordinates**.
- The geometry must have **All of its Rings Closed**.
- The geometry must not be **Empty**.
- Please **union** or **dissolve** your geometries into valid ones for as few as possible geometries.
- Please **remove** insignificant holes in your geometries.
- Please **keep** the point count very low on the endcaps of your buffered geometries.

Cleaning your data (Your files should be considered "clean" before uploading)

- Your data should not contain any overlaps or self-intersections and should be one big valid multipolygon.
- You can clean your data in many GIS tools like QGIS, FME and Mapshaper.

Example using Mapshaper (This technique won't fix 100% of data issues especially if your data has lots of geometry errors).

- Drag your geoson file, import, view and open the console.
- Run the commands in the following order (especially if you see a bunch of red intersections)
 - clean - Fixes geometry issues, such as polygon overlaps and gaps
 - dissolve - Merges features within a layer
 - dissolve2 - Merges adjacent polygons (repairs overlaps and gaps)

- Make sure you check the data for validity between each command. It is your responsibility to make sure your data is correct. Some of these commands remove insignificant holes, etc which can help make your geometry more efficient
- Export using the "geojson-type=FeatureCollection" export option.

Additional (Mapshaper) Information

Reprojecting a shapefile from its projection using mapshaper

Use the console command "proj" as follows:

```
proj init=<Shapefile Base Name> crs=EPSG:4326
```

where **<Shapefile Base Name>** is the base name (no extension) of your shapefile

ex: MYSA.shp, MYSA.prj, MYSA.dbf have been loaded in mapshaper

use:

```
proj init=MYSA crs=EPSG:4326
```

Note: The file MUST include the ENTIRE service area. Files that are uploaded will REPLACE the current service area.

If you have any questions or need help, please contact Customer Connections at customerconnections@georgia811.com or 770-623-5786.