

A Service Area must be uploaded as a Shapefile meeting the following criteria:

Only the shp (spatial) and the prj (projection) need be uploaded.

The shapefile must be in the EPSG:4326 projection. (This is sometimes called LL84 or WGS84)

The shapefile must be wholly contained within a buffer of 200 feet around of the state of Georgia

The shapefile must be less than 6MB in size

The shapefile must contain less than 300,000 points and contain at least four points

The shapefile must not contain any POINT or LINESTRING features. It must not contain any GEOMETRY COLLECTION features

The shapefile must contain ONLY ONE geometry that is either a POLYGON or a MULTIPOLYGON.

The geometry must be a POLYGON or a MULTIPOLYGON.

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.

Details on Polygons and MultiPolygons:

A Polygon is a planar Surface (Area feature), defined by 1 exterior boundary and 0 or more interior boundaries. Each interior boundary defines a hole in the Polygon.

The assertions for polygons (the rules that define valid polygons) are:

1. Polygons are topologically closed.
2. The boundary of a Polygon consists of a set of LinearRings that make up its exterior and interior boundaries.
3. No two rings in the boundary cross, the rings in the boundary of a Polygon may intersect at a Point but only as a tangent.
4. A Polygon may not have cut lines, spikes or punctures
5. The Interior of every Polygon is a connected point set.
6. The Exterior of a Polygon with 1 or more holes is not connected. Each hole defines a connected component of the Exterior.

In the above assertions, Interior, Closure and Exterior have the standard topological definitions. The combination of 1 and 3 make a Polygon a Regular Closed point set.

Polygons are simple geometries.

A MultiPolygon is a MultiSurface (Multi Area feature) whose elements are Polygons.

The assertions for MultiPolygons are :

1. The interiors of 2 Polygons that are elements of a MultiPolygon may not intersect.
2. The Boundaries of any 2 Polygons that are elements of a MultiPolygon may not 'cross' and may touch at only a finite number of points. (Note that crossing is prevented by assertion 1 above).
3. A MultiPolygon is defined as topologically closed.
4. A MultiPolygon may not have cut lines, spikes or punctures, a MultiPolygon is a Regular, Closed point set.
5. The interior of a MultiPolygon with more than 1 Polygon is not connected, the number of connected components of the interior of a MultiPolygon is equal to the number of Polygons in the MultiPolygon.