	DEPARTMENT OF AVIATION **GIS STANDARDS V1.0**		
DATE:	10/07/2021	**REVISED DATE:**	
PREPARED BY: JEREMY GRISHAM	**REVISED BY:**	**APPROVED BY:**	

1.0 References
1.1 [FAA AC 150/5300-18B (Direct Link)](#)
1.2 [FAA AC 150/5300-18B Information Page](#)
1.3 City of Austin GIS Data Standards White Paper
1.4 [ISO Geospatial Metadata Standards](#)

2.0 Deliverables
2.1 All GIS data deliverables shall be in an ESRI compatible format. Acceptable formats are:
- File geodatabase (.gdb)
- Shapefile (.shp)
- Layer package (.lpk)
- Map package (.mpkx)
- ArcGIS Pro Project package (.ppkx)

2.2 Formal metadata shall be provided with all digital data, as well as a more user-friendly version as an additional deliverable which includes a data dictionary for GIS data deliverables. Metadata should be in ISO GIS Standard.

2.3 Documentation of the process, code and/or tools used to obtain results if analysis performed. Requirements:
- Compatibility with the City of Austin Department of Aviation GIS system including but not limited to developing tools and processes with the latest version of coding language(s).
- Comments to accompany scripts and/or codes.
- Data capture methods, if any.
- Documentation on processes and/or tools including version of the tools and coding language(s).

3.0 Data Standards
3.1 All data must follow the City of Austin's Data Standards and Guidelines, as well as FAA Data Standards for applicable data. Pertinent information from the COA Data Standards are below. The full document is available upon request.

3.2 All data must be submitted in an appropriate GIS format with the following coordinate system: *NAD 1983 StatePlane Texas Central FIPS 4203 Feet*

3.3 Feature dataset, feature class, shapefile and attribute field names must meet the following requirements:
- Names must be unique, and must be fully spelled out with underscores in lieu of spaces.
- Avoid abbreviations or generic names, such as "Status" or "Date".
- Ensure that the feature dataset, shapefile or feature class name is descriptive of the data it contains.
- Names must begin with a letter, not a number.
- Names must not contain special characters other than underscores.
- Names must not contain reserved words, such as "select" or "add".
- Names must not contain a year or date, with the exception of static data that represents a snapshot in time and will not be updated.
- All feature classes/shapefiles shall have a defined primary key (unique identifier) OTHER than OBJECTID.
- All feature classes shall contain the editor tracking fields:
  - created_user
  - created_date
  - last_edited_user
  - last_edited_date
- Acronyms are allowed provided that the metadata defines it.

3.4   Examples of acceptable names are:
- Airfield_Light
- Utility_Type
- Airport_Region
- FAA_ID
- Completion_Date

3.5   Examples of unacceptable names are:
- AirfieldLight
- UtilTyp
- AirptRgn
- FAAid
- Date

3.6   Verify that there are no unused or unpopulated fields.

4.0   Metadata Standards

4.1   All submitted GIS data must have metadata provided.

4.2   Some of the metadata content can be automatically generated by ArcCatalog or ArcGIS Pro, such as the list of feature classes, spatial reference and geoprocessing history.

4.3   The following must be manually entered:
- Item Description of feature dataset, feature class or shapefile
- Credits (origin of the data)
- Attribute field descriptions
- Points of contact