



11.
1/24/2019

TO: Local Agency Formation Commission

FROM: Crystal M. Craig, Interim Executive Officer

SUBJECT: GEOGRAPHIC INFORMATION SYSTEMS (GIS) DIGITAL DATA
SUBMITTAL STANDARDS AND REQUIREMENTS.

EXECUTIVE SUMMARY:

At the September 2018 hearing, it was stated during the Executive Officers Report that shape files will be required for future applications after the first of the year. As we are undergoing our Water and Wastewater Municipal Service Review (MSR) process, we are establishing Geographic Information Systems (GIS) mapping of those agencies. By requiring shapefiles to be submitted with applications that include a proposed boundary change, we can maintain digital boundaries for improved records of accuracy and reduce redundancy and duplication of data in map maintenance.

In an effort to increase efficiency and optimize digital technology, the use of digital mapping systems is becoming more common in local government organizations. The utilization of GIS technology provides staff with a powerful information tool to research boundaries and spatially display specific types of information, including city and special district boundaries and their respective spheres, streets, and parcels. In addition, the visual display of information creates a map to be used in different types of analyses such as boundary changes, MSR and sphere of influence reviews, and technical boundary clean-ups.

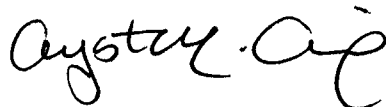
In order to help automate both the checking and mapping maintenance process, Riverside LAFCO is requiring the submission of GIS/ESRI shapefiles (.shp) with applications that include a proposed boundary change. Staff has attached the following guidelines for digital map submission. These guidelines help the applicant submit mapping data to be structured and useful for maintaining databases.

Government Code Section 56652(c) and (e) support the ability to require shapefiles to be submitted with applications.

It is recommended that the Commission make amendments to the attached guidelines, as appropriate, and direct staff to implement

the application requirement of submitting an electronic file in GIS/ESRI Shapefile format for any application that includes a boundary change. The effective date will be the day the Commission takes action.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Crystal M. Craig". The signature is fluid and cursive, with a large initial "C" and "M".

Crystal M. Craig
Interim Executive Officer

Riverside LAFCO Geographic Information Systems (GIS) Digital Data Submittal Standards & Requirements

In order to help automate both the checking and mapping maintenance process, Riverside LAFCO is requiring the submission of GIS/ESRI shapefiles (.shp) with applications that include a proposed boundary change. These files allow for improved records of accuracy and reduce redundancy and duplication of data in map maintenance for cities and special districts under LAFCO's jurisdiction.

Government Code Section 56652(c) and (e) support the ability to require shapefiles to be submitted with applications.

All shapefile submittals to Riverside LAFCO shall be accompanied by an electronic file in GIS/ESRI shapefile format (.shp). The electronic file must meet the following requirements:

Shapefile Format:

The acceptable file formats are as follows:

GIS Data Set(s)/Layer(s).....ESRI geodatabase(.gdb) format
.....ESRI shape files(.shp) format

All shapefile data sets must include at a minimum all files: .shp, .shx, .dbf, .prj.

Spatial Reference:

The County of Riverside uses the following coordinate systems and shall be submitted in the following:

Projected Coordinate system*:	State Plane California VI FIPS 0406 Feet, NAD 1983
Geographic Coordinate system:	GCS North American 1983
Projection:	Lambert Conformal Conic
Geometry Type:	Polygon
Feature Type:	Simple
Linear Feet:	US Survey Feet
Vertical Units:	Foot_US

*(If the line work does not fall inside the parcel, then it is not in the correct coordinate system).

Shapefiles must be created so that the following basic topologic rules are not violated:

- Features will not be duplicated
- Linear features will not overlap
- Polygons must close
- Polygons sharing edges will not have gaps

The digital data submittal shall contain one digital copy of the boundary change(s) (e.g. tract map, parcel map, parcel(s)) and must be transmitted in a .zip file at the time the application is submitted by either email, thumb drive, dropbox or ftp site.

If any changes or revisions to the initial submittal of the boundary change occur, a digital submittal must be resubmitted to LAFCO prior to issuance of a Certificate of Completion.