

1 Introduction

1.1 Purpose

San Francisco International Airport (SFO) Infrastructure Information Management (IIM) and Geographic Information System (GIS) staff (SFO GIS) maintains the airport's geospatial data and corresponding attributes. This document details the specifications and processes that must be followed by both SFO employees and outside consultants during the development of SFO geospatial data.

SFO GIS serves as the Airport's primary central digital GIS Enterprise database repository of primary and secondary facility asset and infrastructure information originating from multiple airport sources, systems and stakeholders, serving as a critical foundation for the preventative maintenance and preliminary planning of future design and construction work at SFO.

The availability of standardized data products and drawing files for use on future projects enhances the value of the original data creation effort in addition to providing one central source of truth to represent the Airport's current geographical configuration. Standardization of this data allows drawing files and individual data layers to be integrated with other data components, ensuring consistency in the planning and design of SFO facilities infrastructure and presents a "common operational picture" of the Airport in GIS and mapping formats that can be incorporated into many airport data management systems and business processes.

Ensuring high quality data at the Airport is crucial not just for design and management purposes but also for safe flight operations. The Federal Aviation Administration (FAA) requires standardized airport geospatial data to be shared and distributed with other airports and their constituents, as well as internally within the FAA. Therefore, the FAA has developed GIS Data Standards governed by three advisory circulars, especially FAA Advisory Circular (AC) 150/5300-18B – General Guidance and specifications for Submission of Aeronautical Surveys to NGS: Field Data Collection and Geographic Information System (GIS) Standards. The geospatial data described in these documents are intended to support those standards and keep the Airport in compliance with FAA GIS data submittal requirements.