

Airports GIS

Ready...Set...Go

Presented to: MAMA Meeting

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Federal Aviation
Administration



Airports GIS



Agenda

- **Background/Benefits – Why?**
- **Transition Policy – When?**
- **Types of Surveys – What?**
- **What's Coming?**



Background/Benefits – Why?

Improve Efficiencies

- Single, authoritative, accessible data source

Reduce Costs

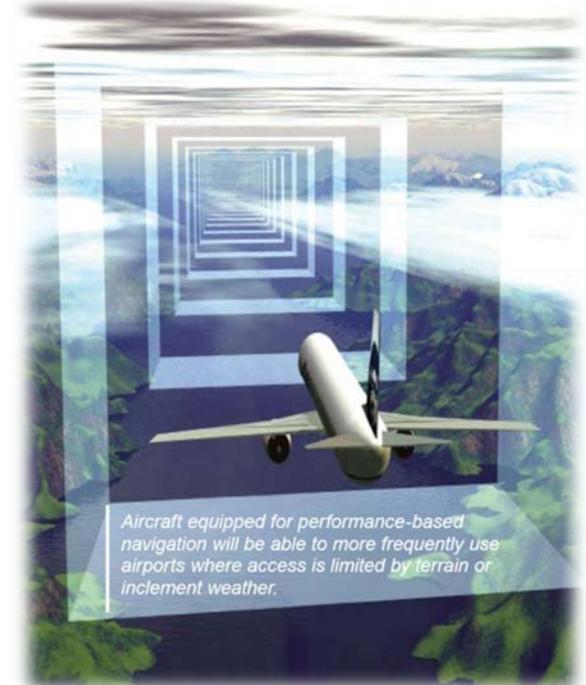
- Airports, FAA, consultants

Improve Safety

- Increased need for real-time data accuracy

NextGen

- A repository of airport information (not just survey data)



Transition Policy – When?

- **Airports Geographic Information System (Airports GIS) Transition Policy**
 - January 14, 2011
- **Airports Geographic Information System (Airports GIS) Transition Policy for Non-Safety Critical Projects**
 - August 23, 2012



Transition Policy – When?

- **Follow AC 150/5300-18 standards and data submittal requirements for:**
 - any project changing safety-critical data as identified in Table 4-1 of the AC, including runway end position, profiles, and NAVAIDS.
 - the collection and processing of all data resulting from design, construction, or planning activities, requiring the development of new or revision of existing instrument approaches.
 - projects modifying the non-safety critical data in the airport layout plan.
 - projects involving only non-safety critical data unless the airport falls into the transition period specified in the Airports GIS Transition Policy.

Transition Policy – When?

- **Surveying for a project involving safety-critical data, must be accomplished using Advisory Circulars 150/5300-16, -17, and -18.**
- **Any new or replacement airport project must incorporate Airports GIS requirements.**
- **Airports must submit Airports GIS data through the Airports GIS website and receive FAA approval of these data before grant closure.**
- **The initial grant offer transmittal letter must set forth Airports GIS requirements as a special condition of the grant offer.**

Transition Policy – When?

- **For projects not involving Safety Critical Data, airports must incorporate Airports GIS requirements on the following schedule:**
 - **FY-2012 – Large/Medium Hub airports**
 - **FY-2013 – Small Hub airports**
 - **FY-2014 – Non Hub airports**
 - **FY 2015 – Non-Primary Airports certificated under Part 139 or with an ATCT**

Transition Policy – When?

State	City/Town	Airport Name	LOCID	Hub Size	AGIS Transition - All Projects (includes non-safety critical data)
ID	Boise	Boise Air Terminal/Gowen Field	BOI	SMALL	FY 2013
MT	Billings	Billings Logan International	BIL	SMALL	FY 2013
MT	Bozeman	Bozeman Yellowstone International	BZN	SMALL	FY 2013
MT	Missoula	Missoula International	MSO	NONHUB	FY 2014
MT	Kalispell	Glacier Park International	GPI	NONHUB	FY 2014
MT	Great Falls	Great Falls International	GTF	NONHUB	FY 2014
ID	Idaho Falls	Idaho Falls Regional	IDA	NONHUB	FY 2014
MT	Helena	Helena Regional	HLN	NONHUB	FY 2014
ID	Lewiston	Lewiston-Nez Perce County	LWS	NONHUB	FY 2014
ID	Hailey	Friedman Memorial	SUN	NONHUB	FY 2014
ID	Twin Falls	Joslin Field - Magic Valley Regional	TWF	NONHUB	FY 2014
MT	Butte	Bert Mooney	BTM	NONHUB	FY 2014
ID	Pocatello	Pocatello Regional	PIH	NONHUB	FY 2014
MT	West Yellowstone	Yellowstone	WYS		FY 2015
MT	Sidney	Sidney-Richland Municipal	SDY		FY 2015
MT	Glasgow	Wokal Field/Glasgow International	GGW		FY 2015
MT	Miles City	Frank Wiley Field	MLS		FY 2015
MT	Havre	Havre City-County	HVR		FY 2015
MT	Lewistown	Lewistown Municipal	LWT		FY 2015
MT	Wolf Point	L M Clayton	OLF		FY 2015
MT	Glendive	Dawson Community	GDV		FY 2015
ID	Coeur d'Alene	Coeur D'Alene - Pappy Boyington Field	COE		FY 2015



Transition Policy – When?

- **Other Non-Primary Airports in the NPIAS are exempted from incorporating AC 150/5300-18 standards for projects involving only non-safety critical data until further notice.**



Transition Policy – When?

- **Safety Critical Projects**

- Relocate/move a runway end or threshold
- Displace threshold
- Extend/shorten/shift runway
- Widen runway
- Add or modify stopway, clearway, or EMAS
- Modify Declared Distances
- New or revised Instrument Approach Procedures
- Install or relocate NAVAIDS (electronic or visual)
- Changes to airport elevation or airport reference point
- Airports currently listed as needing Surface Movement Guidance and Control System charts



Transition Policy – When?

- **Non-Safety Critical Projects**

- Construct or reconstruct taxiway or apron
- Reconstruct or rehabilitate runway
- Acquire Land
- Acquire avigation or noise easement
- Release Land
- AIP funded wetlands, wildlife habitate, or other environmental mapping or delineation
- Approve noise contours from a Part 150 Study
- Rehabilitate or install lighting
- Construct structure/building
- Close any runway
- Install fencing
- Install or replace jet bridge



Transition Policy – When?

- **Non-Safety Critical Projects**

- Master Plan/ALP Update – If aerial photography or obstruction surveys are included, they must be in conformance with the latest version of AC 150/5300-17 and -18.



Transition Policy – When?

- **Program Guidance Letter 12-11, AIP Eligibility for Geographic Information Systems (GIS) and FAA Airports GIS (AGIS) Data Collection**
 - **August 17, 2012**

Transition Policy – When?

- **Surveying costs and data collection, including data collection in support of the Airports GIS program, is not eligible as a stand-alone AIP project.**



Transition Policy – When?

- **Data collection in support of the Airports GIS program is eligible as an allowable cost of an AIP project under any one of the following three circumstances:**
 - a) The scope of the data collection is directly required by a specific AIP-funded project or master planning project, and the collection of the data is required under AC 150/5300-18 to complete the project

Transition Policy – When?

- b) Limited data collection for anything beyond the scope of the AIP-funded project, before being required to do so by the FAA Transition Policy, may be eligible only if all of the following conditions are met:
 - The airport is already collecting data for a specific AIP funded project.
 - The grant in which the data collection is to be included includes a special condition.

Transition Policy – When?

- The extent of data collection that will be funded with AIP must be limited to the collection of data required for an electronic ALP. Data collection beyond that is not allowable and the costs associated with collecting these data are not allowable.
- The airport has received approval in advance of issuing the grant from the Regional Office or Airports District Office program manager to collect data beyond the scope of the AIP project.

Transition Policy – When?

- c) If the airport was given a grant in Airports GIS Pilot Program and the work is part of that grant.

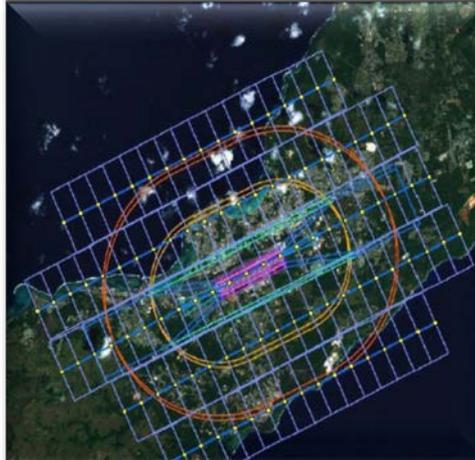


Types of Surveys – What?

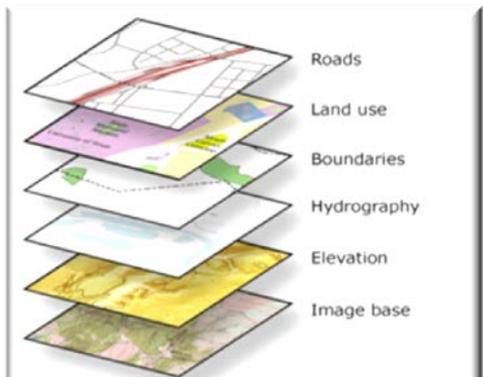
AC 150/5300-16



AC 150/5300-17



AC 150/5300-18



•Source: FAA; NGS; Woolpert; Aerometric; ESRI

Types of Surveys – What?

Federal Aviation Administration
Bringing Safety to America's Skies

Quick Links
Home
Airports
Surveyors
Airports GIS
Newsletters
FAQ's

FAA Airports GIS / TPSS

Login for: AGIS | TPSS
[New User Registration](#) | [Forgot my Username](#) | [Forgot my Password](#)

Username:
Password:

Support Desk: 202-580-7500 or FAASurveySupportDesk@cghitech.com

FAA Airport Surveying - Integration

The Federal Aviation Administration (FAA) is actively working to streamline the multiple existing survey applications into a single integrated system for the delivery of airport and aeronautical survey data to the FAA. While in development, this page serves as a gateway to the existing web applications: Airport GIS and the Third Party Survey System (TPSS). This integration is scheduled for completion in 2008 with the introduction of a single internet portal for the submission of airport and related aeronautical data. This integration is designed to meet the data requirements of an evolving national airspace system while planning to support the Next Generation national airspace system.

The integration is planned for implementation in three phases. The first phase includes integrating all survey submissions into a single application; support for open data standards; enhanced workflow and tracking capabilities; automatic validation on all submitted data; and a GIS viewer for the airport data. The second phase includes support for and production of electronic Airport Obstruction Charts and electronic Airport Layout Plans. The final phase of integration is planned to support multiple versions of the airport (preliminary, current, planned, and temporary) data and the ability to share data with other FAA systems such as IOEAAA and eNASR. Please stay tuned for more information regarding these future phases.

Latest News Letter

Volume 1, Issue 1 includes the following:

- Airport Surveying
- Message
- Survey and Quality Control Plans
- Airports GIS Training
- Events and Conferences
- Announcements
- Tech Tips

[Open as PDF](#)

- Create Log In for Airport Project on the FAA GIS/TPSS Systems
- Allows for Project Tracking by FAA, Sponsor & Consultants
- All Data must be uploaded through System
- Data remains on system to allow future use of existing data

• <https://airports-gis.faa.gov/airportsgis/>

Plans required for Submittal

- The Statement of Work (SOW) sets up the plot of the story
 - **SOW explains WHAT you are going to do**



Scope of Work vs. Statement of Work

- Scope of Work:** A detailed description of all work involved in the project. The scope is agreed upon between the Airport and the consultant with the knowledge of the ADO.

- Statement of Work:** A detailed description of the work involved in creating the obstruction survey. It must agree with the Scope of Work.



Plans Required for Submittal

- The plans expand on the “What” and explain the “How”
 - **AC-150/5300-16A - Geodetic Control Plan**
 - **AC-150/5300-17C – Imagery Plan**
 - **AC-150/5300-18B - Survey/Quality Control Plan**
 - **SOW touches on Geodetic Control, Imagery, and Airport Survey**
 - **Work Plans support the Statement of Work and expand in detail**



Plans Required for Submittal

- **AC-150/5300-16A - Geodetic Control Plan**
 - Required when establishing new PACS/SACS
 - Details methodology for establishing PACS/SACS



Plans Required for Submittal

- AC-150/5300-17C – Imagery Plan
 - **Submission/Approval required before acquisition**
 - **Acquisition report if deviating from Imagery Plan**
 - **Details methodology for Imagery Acquisition and Use**



Plans Required for Submittal

- AC-150/5300-18B - Survey/Quality Control Plan
 - Required for any survey project initiated thru AGIS (except Existing Airport Data Surveys)
 - Submission/Approval required before project commencement
 - Details methodology for data acquisition and quality control
 - Outlines GIS Data Attribution and Features Collected

**All Plans must be submitted to the FAA through the
FAA GIS Website**



Plans Required for Submittal

- **Together, project plans tell the story from beginning to end. They:**
 - Provide background and purpose
 - Provide a timeline
 - Provide a work plan
 - Defend methodologies and tie to advisory circulars



What's Coming?

FAA Planned and Conceptual Tools (“Apps”)

electronic Airport Layout Plan (eALP) application

- Will provide planning, measurement, compliance checking and review/comment capabilities

Airspace Analysis Module

- Will allow FAA and airport staff to check the heights of existing and/or proposed obstacles to navigable airspace

Modification to Standards Module

- Will allow FAA staff to review airport requests for a modification to standard airport design criteria

Runway Safety Area Module

- Will help airports check for conflicts within the runway safety areas

Airport Design Tool

- Will help airport planners and designers design and FAA staff to check to ensure proposed airport configuration changes fall within acceptable design criteria

Pavement Management module

- Will allow FAA and airport staff to monitor, predict and allocate resources to better maintain airfield pavement

Links to Grants and PFC Data

- Will allow authorized users to research historic grant and PFC data as a reference

What's Coming

