Reconciling for Air Force Growth and Development

By AFCEC Geospatial Integration Office

The Air Force Civil Engineer Center's Geospatial Integration Office (GIO) collaborates with the Real Property Office (RPO) to analyze and confirm that all data in the Accountable Property System of Record (APSR) is represented correctly in the Geographic Information System (GIS).

Background of Real Property Reconciliation

The federal government has taken significant measures toward ensuring the Department of Defense (DoD) is accountable for all its real property (RP) assets, and federal auditors have identified georeferencing and visualization of RP assets to be a best practice for sustaining an accurate asset portfolio. In the fall of 2021, the DoD underwent its fourth financial statement audit and received a disclaimer of opinion from the DoD Inspector General (IG), which meant no opinion was being given regarding financial statements. This disclaimer was based on management's assertions and not independent audit testing.

Establishing Funding Benchmarks

Why do we reconcile real property assets? An accurate inventory is critical for the Office of the Secretary of Defense to sustain resourcing requirement calculations determined from the annual Facility Sustainment Model. The FSM customizes and justifies facility requirements and sustainment cost factors, improving funding allocation.

GeoBase Supports Installations in RP Data Reconciliation

Inconsistencies brought to light during the RP reconciliation prompted an initiative to address significant inventory requirements. To better identify and mitigate discrepancies and improve audit readiness, the AFCEC GIO developed a scripted tool used to run through the Real Property Unique Identifier (RPUID) fields to generate a metrics report for matched and unmatched records for linear structures. Deployed to installations in June 2021, the tool has gone through several iterations continuing to improve with the most accurate outputs based on feedback from installations.

The Air Force Infrastructure Investment Strategy (I2S) and the Department of Air Force (DAF) Financial Improvement and Audit Remediation (FIAR) audit requires an accurate and complete APSR. The APSR is the source data used to calculate the DAF Plant Replacement Value. The PRV establishes forecasted funding for recapitalization efforts in support of the investment strategy.

The DAF PRV is in a volatile state due to inaccuracies of the source data in the APSR. Achieving a clean audit will take time, but the value of auditing is in the journey. Financial statement audits give management independent validation and feedback on the effectiveness of each reporting entity's business systems, processes, and controls. Installation Managers use that information to identify root causes of deficiencies and prioritize remediation work. Installation and DoD leadership can use root cause information to manage risks and make strategic decisions such as allocating resources, deploying new systems, and implementing new policies. Annual audits facilitate change management by spotlighting continual improvement through successful remediations of findings.

Delivering Training to the GeoBase Community

In collaboration with the RPO and to assist installations in meeting audit goals, the AFCEC GIO holds monthly training sessions demonstrating various methods for reconciling assets. The last training event featured land parcels and included over 120 attendees from the AFCEC GIO and RPO. To supplement and reinforce training, the RP team published Knowledge Base Articles (KBAs) on reconciliation topics such as RP land reconciliation tips, historical maps, and referencing land survey data which can be accessed through a self-help portal.

Joint Base Andrews, Maryland is a prime example of the positive impact that training can have on a base. They improved the percentage of reconciled land assets from 0 to 100.

"Adam Palmisano (Geospatial Specialist II, AFCEC GIO) was imperative in helping me understand this tasker," said James Fleming, a GeoBase GIS specialist at Andrews. "He not only assisted in my progression through the reconciliation process, but he also helped expand our knowledge across the installation allowing us to reflect

accurate numbers and inconsistencies to the RPO, which was key to our efforts. He confirmed the proper steps in the reconciliation process and assured that I was on the right path when I was using the County Land Parcel records and reaching out to the company from which JBA purchased land."

Working Together Across Installations

The AFCEC GIO works directly with installation personnel to include GIOs, GIS Analysts, and RPOs. The RP Land Monthly Reporting Dashboard provides overlay analysis of Land Parcel Study and installation geospatial information for land parcel Tract ID reconciliation. Utilizing the Dashboard, users actively retrieve historical Land Study parcels for reconciliation with their existing geospatial data. The dashboard indicates remaining parcels needed to match with an RPUID from the APSR and breaks down the percentage at each installation. Users have the ability to filter based on their major command and installation.

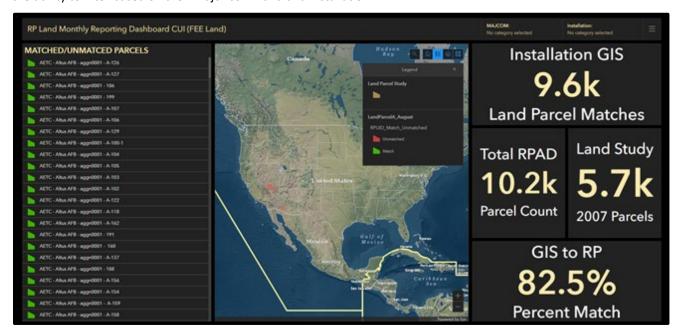


Figure 1 – RP Land Monthly Reporting Dashboard CUI (FEE Land)

Successful Teamwork

The AFCEC GIO empowers installations through every phase of reconciliation by conducting multiple base visits, attending virtual meetings, and providing direct manpower resources—all to ensure the highest achievable RP reconciliation outcomes. This level of GIS support enables each installation with capabilities through enterprise collaboration and oversight to support the USAF GeoBase Program.

Figures 2 and 3 depict the timeframe in which GeoBase began assisting Real Property with the reconciliation process in July 2021 until the current date.

RPA TYPE	TOTAL	MATCHED	JULY 1, 2021 % COMPLETE		
BUILDINGS	58,360	46,344	79%		
STRUCTURES	53,951	30,320	56%		
LINEAR STRUCTURES	39,154	18,447	47%		
TOTAL FEATURE RECONCILIATION	151,465	95,111	63%		

Figure 2 - Initial Real Property Values

RPA TYPE	TOTAL	MATCHED	SEPT 1, 2022 % COMPLETE	MATCHED WITH JUSTIFICATIONS	SEPT 1, 2022 % COMPLETE WITH JUSTIFICATIONS	
BUILDINGS	58,360	54,183	93%	54,924	94%	
STRUCTURES	53,951	43,283	80%	44,672	83%	
LINEAR STRUCTURES	39,154	29,103	74%	30,339	77%	
LAND ASSETS	10,639	9,945	93%	9,988	94%	
TOTAL FEATURE RECONCILIATION	162,104	136,514	84%	139,923	86%	

Figure 3 – Current Values Showing Overall Progress of the RP Reconciliation Process Among All Assets

GREEN = 80%	YELLOW = 60-79%	RED = 59%

Geospatial Representation: Advancing Real Property Data

DoD federal auditors recognize GIS database records and the accompanying metadata as strong evidence of the existence and completeness of an asset, and the RPO has arguably been the leader in using GIS technology to inventory and manage their complex portfolio of assets.

Remediating audit findings from the full financial statement audits is at the core of DoD's audit strategy and the most certain, cost-effective path to achieving a clean audit. The findings resulted in two benefits: the discovery of real property and general equipment not recorded in the proper system, and freeing up money previously obligated but not executed. Progress will be measured through the annual audit process and auditor confirmation that an audit finding is closed.

Finally, as reporting entities remediate audit findings and improve overall financial management processes and information, more timely and reliable data will become available helping to achieve the final goal: putting accurate data into the hands of decision-makers and making it actionable.

"Air Force built infrastructure asset accountability focus remediates a long-standing existence and completeness real property inventory condition that improves our audit fitness and financial accounting integrity," - Roger Clarke, USAF GeoBase Support Manager

The RP Geospatial Portal is available at

https://maps.afmc.af.mil/portal/apps/sites/#/rp-land-reconciliation-2021

For questions and support, please contact the GeoBase Service Desk at AFCEC.GIO.Workflow@us.af.mil or https://jira.il4.dso.mil/servicedesk/customer/portal/177

(**Editor's Note:** Adam Palmisano, Anthony Chavez, and Tyler Brocious, AFCEC GIO Geospatial Analysts, contributed to this report)