



**U.S. Department of Transportation**  
**Privacy Impact Assessment**  
**Federal Aviation Administration (FAA)**

**Tableau**

**Responsible Official**

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## Executive Summary

The Federal Aviation Administration's (FAA) Tableau is an enterprise-level service used by federal employees and contractors across the agency to analyze, visualize, and share data. Tableau maintains hundreds of data connections that allow it to import, analyze, and display data in various formats. This Privacy Impact Assessment (PIA) is being conducted in accordance with Section 208 of the [E-Government Act of 2002](#) because Tableau contains records that could include individually identifying information on members of the public.

### What is a Privacy Impact Assessment?

*The Privacy Act of 1974 articulates concepts for how the federal government should treat individuals and their information and imposes duties upon federal agencies regarding the collection, use, dissemination, and maintenance of personally identifiable information (PII). The E-Government Act of 2002, Section 208, establishes the requirement for agencies to conduct privacy impact assessments (PIAs) for electronic information systems and collections. The assessment is a practical method for evaluating privacy in information systems and collections, and documented assurance that privacy issues have been identified and adequately addressed. The PIA is an analysis of how information is handled to—i) ensure handling conforms to applicable legal, regulatory, and policy requirements regarding privacy; ii) determine the risks and effects of collecting, maintaining and disseminating information in identifiable form in an electronic information system; and iii) examine and evaluate protections and alternative processes for handling information to mitigate potential privacy risks.<sup>1</sup>*

*Conducting a PIA ensures compliance with laws and regulations governing privacy and demonstrates the DOT's commitment to protect the privacy of any personal information we collect, store, retrieve, use and share. It is a comprehensive analysis of how the DOT's electronic information systems and collections handle personally identifiable information (PII). The goals accomplished in completing a PIA include:*

- *Making informed policy and system design or procurement decisions. These decisions must be based on an understanding of privacy risk, and of options available for mitigating that risk;*
- *Accountability for privacy issues;*
- *Analyzing both technical and legal compliance with applicable privacy law and regulations, as well as accepted privacy policy; and*
- *Providing documentation on the flow of personal information and information requirements within DOT systems.*

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<sup>1</sup>Office of Management and Budget's (OMB) definition of the PIA taken from guidance on implementing the privacy provisions of the E-Government Act of 2002 (see OMB memo of M-03-22 dated September 26, 2003).



*Upon reviewing the PIA, you should have a broad understanding of the risks and potential effects associated with the Department activities, processes, and systems described and approaches taken to mitigate any potential privacy risks.*

## **Introduction & System Overview**

The Tableau system is a data analytics tool based on the commercial off-the-shelf (COTS) product, Tableau Server. Tableau is used throughout multiple lines of business at the FAA to provide a centralized data analysis tool. The system allows site owners to analyze and visualize their data. Site owners can share these self-created visuals to users who have access to their individual sites. The system enables FAA Tableau site owners to connect to FAA data sources hosted in an FAA on-premises data center, a regional office server, and in an FAA cloud environment. Site owners can choose to connect to live data or to data extracts by setting up a scheduled replication to a specified FAA-hosted data source.

Only FAA employees may be Tableau site owners. FAA employees and contractors can become site administrators and/or content creators. Once an FAA employee becomes a Tableau site owner, they are known as the Government Responsible Individual (GRI) and receive a preconfigured site that enables them to invite other FAA employees and contractors to use their site to share data and visualizations. Tableau site owners can connect to FAA data sources hosted both in the Office of Information & Technology Services Enterprise Data Center (AIT EDC) and within the FAA cloud environments.

All users access Tableau at <https://tableau.faa.gov> via their Personal Identity Verification (PIV) card and the FAA Directory Services (FAA DS [Active Directory]). Site owners are required to sign a Rules of System Use & Behavior (ROSU) agreement upon access. The ROSU requires site administrators to follow applicable FAA policies such as only allowing connection to FAA electronic systems on the approved interconnection list, ensuring stale content (content that is old, no longer relevant, or not needed) is removed, implementing personally identifiable information (PII) protection mechanisms, which includes tagging PII within Tableau, and ensuring compliance with the Privacy Act. All users are required to attend annual FAA-wide training on the security and privacy of government information technology (IT) systems.

Once within Tableau, users can perform reporting and data visualization tasks relevant to their specific mission or business need. Content creators can connect to live data or extracts by setting up a scheduled replication to a specified FAA-hosted data source via the Office of Information & Technology Enterprise Data Center (AIT EDC) and within cloud systems. Data pulled into Tableau is primarily analytics data; however, some PII is expected to be pulled. For example, via a pull from the FAA DroneZone, an authorized user can create



reports on Unmanned Aircraft System (UAS) registration information, including name, address, email address, telephone, UAS serial number, UAS registration number, and purchase confirmation number. Users can only pull data into Excel, Oracle, Structured Query Language (SQL) Servers, PostgreSQL, Web Services, SharePoint, and open database connection (ODBC). Data is pulled in three ways: (1) a live query where the data is not maintained; (2) a one-time pull that creates an extract; or (3) a scheduled refresh where the data is refreshed based on a defined time period (i.e. every day, every 30 days).

Audit logs are maintained and could include usernames in Tableau from systems to which they already have authorized access.

### **Fair Information Practice Principles (FIPPs) Analysis**

*The DOT PIA template is based on the fair information practice principles (FIPPs). The FIPPs, rooted in the tenets of the Privacy Act, are mirrored in the laws of many U.S. states, as well as many foreign nations and international organizations. The FIPPs provide a framework that will support DOT efforts to appropriately identify and mitigate privacy risk. The FIPPs-based analysis conducted by DOT is predicated on the privacy control families articulated in the Federal Enterprise Architecture Security and Privacy Profile (FEA-SPP) v3<sup>2</sup>, sponsored by the National Institute of Standards and Technology (NIST), the Office of Management and Budget (OMB), and the Federal Chief Information Officers Council and the Privacy Controls articulated in Appendix J of the NIST Special Publication 800-53 Security and Privacy Controls for Federal Information Systems and Organizations<sup>3</sup>.*

### **Transparency**

*Sections 522a(e)(3) and (e)(4) of the Privacy Act and Section 208 of the E-Government Act require public notice of an organization's information practices and the privacy impact of government programs and activities. Accordingly, DOT is open and transparent about policies, procedures, and technologies that directly affect individuals and/or their personally identifiable information (PII). Additionally, the Department should not maintain any system of records the existence of which is not known to the public.*

The FAA employs multiple techniques to ensure that individuals are informed of the purpose for which the FAA collects, uses, disseminates, and retains their PII within Tableau. Tableau access-related records about FAA users are maintained in accordance with the Department's Privacy Act System of Records Notice (SORN), DOT/ALL 13, *Internet/Intranet Activity and Access Records*, 67 FR 30758 (May 7, 2002), which covers computer access records. Tableau is not a Privacy Act system of records for the substantive records, reports, or data analytics within its system. However, Tableau may pull data from

<sup>2</sup> <http://www.cio.gov/documents/FEA-Security-Privacy-Profile-v3-09-30-2010.pdf>

<sup>3</sup> [http://csrc.nist.gov/publications/drafts/800-53-Appendix-J/IPDraft\\_800-53-privacy-appendix-J.pdf](http://csrc.nist.gov/publications/drafts/800-53-Appendix-J/IPDraft_800-53-privacy-appendix-J.pdf)



systems that have an associated SORN. All SORNs are listed on the Department of Transportation (DOT) Privacy [webpage](#). Tableau only maintains convenience copies of these records. Convenience copies of records are duplicate copies of official records that are used by employees or contractors in completing their job duties. An individual whose record is maintained in Tableau would need to make a Privacy Act request of the official system of record, not Tableau. The FAA does not make disclosures out of Tableau. Disclosures must be made from the originating system pursuant to that system's applicable SORNs.

### Individual Participation and Redress

*DOT provides a reasonable opportunity and capability for individuals to make informed decisions about the collection, use, and disclosure of their PII. As required by the Privacy Act, individuals should be active participants in the decision-making process regarding the collection and use of their PII and they are provided reasonable access to their PII and the opportunity to have their PII corrected, amended, or deleted, as appropriate.*

Tableau only maintains convenience copies of records. An individual whose record is maintained in Tableau would need to make a Privacy Act request of the official system of record, not Tableau. The FAA does not make disclosures out of Tableau. Disclosures must be made from the originating system pursuant to that system's applicable SORN(s). FAA users receive notice of proper use of government systems in the form of the FAA Order 1370.121B, "FAA Information, Security, and Privacy Program & Policy."

Under the provisions of the Privacy Act, individuals may request searches to determine if any records pertain to them. Individuals wishing to know if their records appear in a system may inquire in person or in writing, as follows:

Federal Aviation Administration  
Privacy Office  
800 Independence Avenue, SW  
Washington, DC 20591

The following must be included in all requests:

- Name
- Mailing address
- Phone number and/or email address
- A description of the records sought, and if possible, the location of the records.

Individuals contesting information contained in this system should make their requests in writing, detailing the reasons why the records should be corrected, to the following address:

Federal Aviation Administration  
Privacy Office



800 Independence Avenue, SW  
Washington, DC 20591

## Purpose Specification

*DOT should (i) identify the legal bases that authorize a particular PII collection, activity, or technology that impacts privacy; and (ii) specify the purpose(s) for which it collects, uses, maintains, or disseminates PII. The PII contained in PTB is utilized for transit subsidy usage reconciliation, reporting for the agency, monitoring, and tracking participant usage.*

The FAA utilizes Tableau and the information stored therein pursuant to the following authorities:

- 1) Title 49 United States Code (U.S.C.) § 40101, Policy, which covers matters relating to the public interest and consistent with public convenience and necessity.
- 2) 49 U.S.C. § 322, General Powers, which requires the Department of Transportation Secretary carry out aviation duties and powers.

As described in the overview, Tableau pulls in data from various systems to perform analytics. Some of that data may come from Privacy Act systems of records. Site owners are responsible for ensuring that all data within Tableau that is subject to the Privacy Act is used only in accordance with the original purpose for the information's collection, consistent with the applicable SORN.

System access data is used by the FAA consistent with the purposes for which it was collected as described in DOT/ALL 13, "Internet/Intranet Activity and Access Records", 67 FR 30758 (May 7, 2002). Specifically, to plan and manage system services in performance of official duties, and to monitor and investigate improper computer use.

## Data Minimization & Retention

*DOT should collect, use, and retain only PII that is relevant and necessary for the specified purpose for which it was originally collected.*

The FAA minimizes its data maintenance, use, and retention in Tableau to the relevant and necessary information to meet its authorized business purpose, providing a reporting mechanism for various FAA lines of business. The Tableau ROSU requires GRIs to review content on their sites to ensure it is still necessary. GRIs are notified and suggested to remove content that has not been accessed for six months. Tableau sends automated messages to GRIs to notify them that content has not been accessed in six months and should be examined for removal. Tableau also notifies the FAA Record Management team via email when records have not been accessed within four years.



Tableau content is intended for collaboration and reporting purposes and is not used as a repository to store official government records. GRIs are instructed to work with their line of business Record Management Officers if they have long-term business needs to maintain data.

Records within Tableau are maintained in accordance with [General Record Schedule 5.1, Common Office Records, item 020, approved July 2017](#). Records within Tableau are considered non-record-keeping copies of electronic records, and are destroyed immediately after copying to a recordkeeping system or otherwise preserving, but longer retention is authorized if required for business use.

System development records are maintained in accordance with [General Record Schedule 3.1, System Development Records, item 020, approved July 2017](#). System development records are destroyed five years after system is superseded by a new iteration, or is terminated, defunded, or no longer needed for an agency/IT administrative purposes, but longer retention is authorized if required for a business use.

Information technology operations and maintenance records are maintained in accordance with [General Record Schedule 3.1, System Development Records, item 20, approved July 2017](#), and are destroyed three years after agreement, control measures, procedures, project, activity, or transaction is obsolete, completed, terminated, or superseded, but longer retention is authorized if required for business use.

System Access Records are maintained in accordance with [General Records Schedule 3.2, Information Systems Security Records, item 030, approved September 2016](#). These records are temporary and are destroyed when business use ceases.

### **Use Limitation**

*DOT shall limit the scope of its PII use to ensure that the Department does not use PII in any manner that is not specified in notices, incompatible with the specified purposes for which the information was collected, or for any purpose not otherwise permitted by law.*

Tableau is not a Privacy Act system of records for the substantive records, reports, or data analytics within its system. However, Tableau may pull data from systems with an associated SORN and applicable routine uses. All SORNs are listed on the Department of Transportation (DOT) Privacy [webpage](#). Tableau has an approved interconnection list, and connections to Tableau may only be made with systems on this list. All use of data within Tableau is in accordance with the applicable SORNs that cover the source system of the data.



Profile and logging PII collected by the FAA is used as specified by the DOT's system of records notice, [DOT/ALL 13, \*Internet/Intranet Activity and Access Records\*](#). In addition to other disclosures generally permitted under 5 U.S.C. §552a(b) of the Privacy Act, all or a portion of the records or information contained in this system may be disclosed outside DOT as a routine use pursuant to 5 U.S.C. § 552a(b)(3) as follows:

- To provide information to any person(s) authorized to assist in approved investigations of improper access or usage of DOT computer systems;
- To an actual or potential party or his or her authorized representative for the purpose of negotiation or discussion of such matters as settlement of the case or matter, or informal discovery proceedings;
- To contractors, grantees, experts, consultants, detailees, and other non-DOT employees performing or working on a contract, service, grant cooperative agreement, or other assignment from the Federal government, when necessary to accomplish an agency function related to this system of records; and
- To other government agencies where required by law.

The Department has also published 15 additional routine uses applicable to all DOT Privacy Act systems of records. These routine uses are published in the Federal Register at 75 FR 82132, December 29, 2010, and 77 FR 42796, July 20, 2012, under "Prefatory Statement of General Routine Uses." Available at <https://www.transportation.gov/individuals/privacy/privacy-act-system-records-notice>.

## Data Quality and Integrity

*In accordance with Section 552a(e)(2) of the Privacy Act of 1974, DOT should ensure that any PII collected and maintained by the organization is accurate, relevant, timely, and complete for the purpose for which it is to be used, as specified in the Department's public notice(s).*

The FAA minimizes its use, maintenance, and retention of data in Tableau to only relevant and necessary information to meet its authorized business purpose, which is to provide a reporting mechanism for various FAA lines of business. The Tableau ROSU requires GRIs to review content on their sites to ensure it is still necessary. GRIs are notified and suggested to remove content that has not been accessed for six months. Tableau sends automated messages to GRIs to notify them that content has not been accessed in six months and should be examined for removal. Tableau also notifies the FAA Record Management team via email when records have not been accessed within four years. All content in Tableau that contains PII is required to have a PII content tag. Automated scans notify GRIs of content that has not been appropriately tagged. If errors are found in data that is provided to





Tableau, corrections must be made in the original source system and are not made in Tableau.

## Security

*DOT shall implement administrative, technical, and physical measures to protect PII collected or maintained by the Department against loss, unauthorized access, or disclosure, as required by the Privacy Act, and to ensure that organizational planning and responses to privacy incidents comply with OMB policies and guidance.*

The FAA protects PII with reasonable security safeguards against loss or unauthorized access, destruction, usage, modification, or disclosure. These safeguards incorporate standards and practices required for federal information systems under the FISMA and are detailed in Federal Information Processing Standards (FIPS) Publication 200, *Minimum Security Requirements for Federal Information and Information Systems*, dated March 2006, and NIST Special Publication (SP) 800-53, Revision 4, *Security and Privacy Controls for Federal Information Systems and Organizations*, dated August 4, 2022.

Tableau implements administrative, technical, and physical measures to protect against loss, unauthorized access, or disclosure. The principle of least privilege is used to grant access to FAA federal employees and contractors, and user actions are tracked in the Tableau audit logs. GRIs are required to perform a monthly review of their content and site permissions.

## Accountability and Auditing

*DOT shall implement effective governance controls, monitoring controls, risk management, and assessment controls to demonstrate that the Department is complying with all applicable privacy protection requirements and minimizing the privacy risk to individuals.*

The FAA's Information Security and Privacy Service (AIS), Security Governance Division is responsible for the administration of FAA Order 1370.121B, "*FAA Information Security and Privacy Program & Policy*." FAA Order 1370.121B defines the various privacy requirements of the *Privacy Act of 1974*, as amended (the Privacy Act), the *E-Government Act of 2002* (Public Law 107-347), the *Federal Information Security Management Act (FISMA)*, DOT privacy regulations, OMB mandates, and other applicable DOT and FAA information technology management policies and procedures. In addition to these, other policies and procedures will be consistently applied, especially as they relate to the access, protection, retention, and destruction of PII. Federal and contract employees are given clear guidance on their duties as they relate to collecting, using, processing, and security privacy data. Guidance is provided in the form of mandatory annual security and privacy awareness training. The DOT and FAA Privacy Offices will conduct periodic privacy compliance reviews of Tableau relative to the requirements of OMB Circular A-130, *Managing*



*Information as a Strategic Resource* [OMB Circular A-130, Managing Information as a Strategic Resource.](#)

### **Responsible Official**

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### **Approval and Signature**

Karyn Gorman  
Chief Privacy Officer  
Office of the Chief Information Officer

DOT Privacy Office - Approved - 03 13 2023