

FHWA DATA GOVERNANCE PLAN

FACT SHEET

Background

There is a growing need to improve the quality, consistency, and management of FHWA data to address programmatic needs and stakeholder concerns.

The concept of Data Governance has been discussed within FHWA since the 1990's; and there have been efforts since then to develop formal processes. FHWA's existing data programs are a set of stove-piped systems that have, for the most part, been created to address a set of specific programmatic needs. The extent of Data Governance "principles" implemented in each system varies greatly and is often dictated by the office responsible for the system and the group responsible for creating and maintaining it.

Meanwhile, Congress has directed FHWA to improve the collection, management, and transparency of data. For example, Section 1203 of the Moving Ahead for Progress in the 21st Century Act (MAP-21) calls on FHWA to collect and maintain standardized data to carry out a performance-based approach. House Report 111-564 directs FHWA to "launch an internal strategic review of FMIS (Fiscal Management Information System) and associated FHWA systems to define known and future grant management system requirements, including Federal Funding Accountability and Transparency Act and Recovery Act information needs; stakeholder data analysis objectives; and expanded query, reporting, and interface requirements."

Data Governance Goals

- Leadership
- Quality
- Prioritization
- Cooperation
- Flexibility
- Utilization

To address these internal and external concerns, FHWA senior leadership created the Data Governance Advisory Council to develop a corporate data management approach. The Council began meeting early in 2013 and focused initially on studying how Data Governance has been implemented by other modes within the US DOT, by States, and by the private sector. The Council spent the remainder of the year working on drafting an outline for the *Data Governance Plan* and finalizing the first volume of the Plan, the *FHWA Data Governance Primer*. Once complete, the *Data Governance Plan* will serve as the governing set of policies and procedures for implementing Data Governance within FHWA.

Definition

The FHWA Data Governance Advisory Council has adopted the following definition of Data Governance:

It is the discipline that establishes the criteria and requirements for data; their quality, management, policies, and business process; and risk management for handling of data within FHWA. In short, it is a corporate approach to collecting and managing data.

Scope

FHWA Data Governance will be a collaborative effort involving all functional areas within the organization and across the DOT. The focus will be on the systems that are used to collect, store, analyze, and report data, as well as on the users and uses of the data. This is an encompassing effort that will include all business units within FHWA.

FHWA Data Governance Plan – Fact Sheet

The *Data Governance Plan* is intended to assist in the development and maturity of data programs, including systems that reside on FHWA-owned servers that are managed by Information Technology Services staff, as well as FHWA-owned systems hosted by external entities. Smaller staff-developed databases (e.g., MS Access or MS SQL Server) residing on network drives or SharePoint may eventually be included depending on the following: 1) number of people using the database, 2) size and extent of the data being stored and processed, and 3) applicability outside of the Program or Division Office. **At this time, individual or work group developed and maintained spreadsheets are not within the scope of FHWA Data Governance efforts.**

Key Data Issues

- Finding consistent data for business needs and partner/customer inquiries.
- Identifying real and perceived data quality issues.
- Integrating data across offices and Divisions.
- Identifying data that are valuable and needed to drive decisions.
- Standardizing approach to address existing data and new data needs.
- Preventing redundant data collection.
- Accessing needed data.
- Keeping current with changes in computer technology and electronic data storage standards.
- Maintaining security and accessibility so that data elements cannot be lost, corrupted, or otherwise made unavailable to users.

Benefits

FHWA employees, partners, and stakeholders will benefit from an increased awareness of the data programs and the type of data collected. Those who regularly use data will benefit from improved data system documentation that accurately captures the extent and type of data collected. New policies and procedures will lead to improvements in data consistency and quality. Data providers along with data system owners and managers will benefit from a clear set of definitions, policies, and procedures designed to streamline the management of the data systems and address redundant and inconsistent data.

Next Steps

The Data Governance Plan will be published in six volumes. Following the successful dissemination of each volume in the Data Governance Plan, the Data Governance Advisory Council will undertake a series of educational and promotional activities to inform and educate FHWA staff and, as appropriate, non-FHWA partners and stakeholders. The development of the Data Governance Plan is likely to span several years, and is therefore subject to change based on a wide variety of internal and external factors. Deployment and implementation of the Data Governance Plan will likely take several additional years.

FHWA Data Principles

- Relevance
- Believability
- Accuracy
- Consistency
- Timeliness
- Accessibility
- Interpretability
- Traceability
- Privacy

Additional Information

The Data Governance Advisory Council will use SharePoint as the primary mechanism for disseminating information amongst FHWA staff. The latest version of the *Data Governance Plan*, along with upcoming training is available at: http://our.dot.gov/office/fhwa.policy/HPPI/Data_Governance/default.aspx.