# Understanding Data Governance

## What is data governance?

* DataSF [Research Brief: Data Governance, Quality and Integration, Section 2.1](https://docs.google.com/document/d/1zObXTSM7oKAQwbpqEf1lT4gcr6Zq2XgO1wSH1fr4LlI/edit#heading=h.sonmisabl9qm)
  + System that decides:
    - Who is responsible for what data
    - What is expected of those who are responsible for managing data
    - The systems and roles that support the technical management and dissemination of data
  + Data governance is about the exercise of authority, control and shared decision-making over the management of data assets.
  + Data governance is the process by which a company manages the quality, consistency, usability, security and availability of its data.
  + Set of approaches for how we obtain/produce, manage, share, and use data
* The Data Governance Initiative (DGI) [Data Governance Framework](http://www.datagovernance.com/wp-content/uploads/2014/11/dgi_framework.pdf)
  + Data governance is a system of decision rights and accountabilities for information-related processes, executed according to agreed-upon models which describe who can take what actions with what information, and when, under what circumstances, using what methods.
* NASCIO [Data Governance - Managing Information as an Enterprise Asset](http://www.nascio.org/Portals/0/Publications/Documents/NASCIO-DataGovernance-Part1.pdf)
  + Data Governance refers to the operating discipline for managing data and information as a key enterprise asset. This operating discipline includes organization, processes and tools for establishing and exercising decision rights regarding valuation and management of data. Key aspects of data governance include decision making authority, compliance monitoring, policies and standards, data inventories, full lifecycle management, content management, records management, preservation, data quality, data classification, data security and access, data risk management, and data valuation.
* Stanford University’s [Data Governance Maturity Model](https://web.stanford.edu/dept/pres-provost/cgi-bin/dg/wordpress/wp-content/uploads/2011/11/StanfordDataGovernanceMaturityModel.pdf)

## Why focus on data governance?

* DataSF [Research Brief: Data Governance, Quality and Integration, Section 2.1](https://docs.google.com/document/d/1zObXTSM7oKAQwbpqEf1lT4gcr6Zq2XgO1wSH1fr4LlI/edit#heading=h.sonmisabl9qm)
  + To support the open data program
  + To facilitate cross department data sharing
  + To ensure that cross department needs are met in the course of generating data
  + To increase the quality, usability and consistency of the City’s data
* US Federal Highway Administration [Data Governance Plan, Section 1.2](https://www.fhwa.dot.gov/datagov/dgpvolume%201.pdf)
  + Address key data issues:
    - Finding consistent data for business needs and partner/customer inquiries.
    - Identifying real and perceived data quality issues.
    - Integrating data across offices.
    - 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.
* The DGI [Data Governance Framework](http://www.datagovernance.com/wp-content/uploads/2014/11/dgi_framework.pdf)
  + Enable better decision-making
  + Reduce operational friction
  + Protect the needs of data stakeholders
  + Train management and staff to adopt common approaches to data issues
  + Build standard, repeatable processes
  + Reduce costs and increase effectiveness through coordination of efforts
  + Ensure transparency of processes

## Examples of Data Governance Policies

US Federal Highway Authority [Data Governance Charter, Appendix B (pages 21-23)](https://www.fhwa.dot.gov/datagov/dgpvolume%201.pdf)

US Department of Education [Data Governance Checklist](http://ptac.ed.gov/sites/default/files/data-governance-checklist.pdf)

[Open data policy with governance aspects](https://docs.google.com/document/d/1zdRqPlnoECpHNIdlQdSaQDIG8LxVWRJR3OEgnQ6yy38/edit?usp=sharing)

## Data Governance Policy Relationships

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