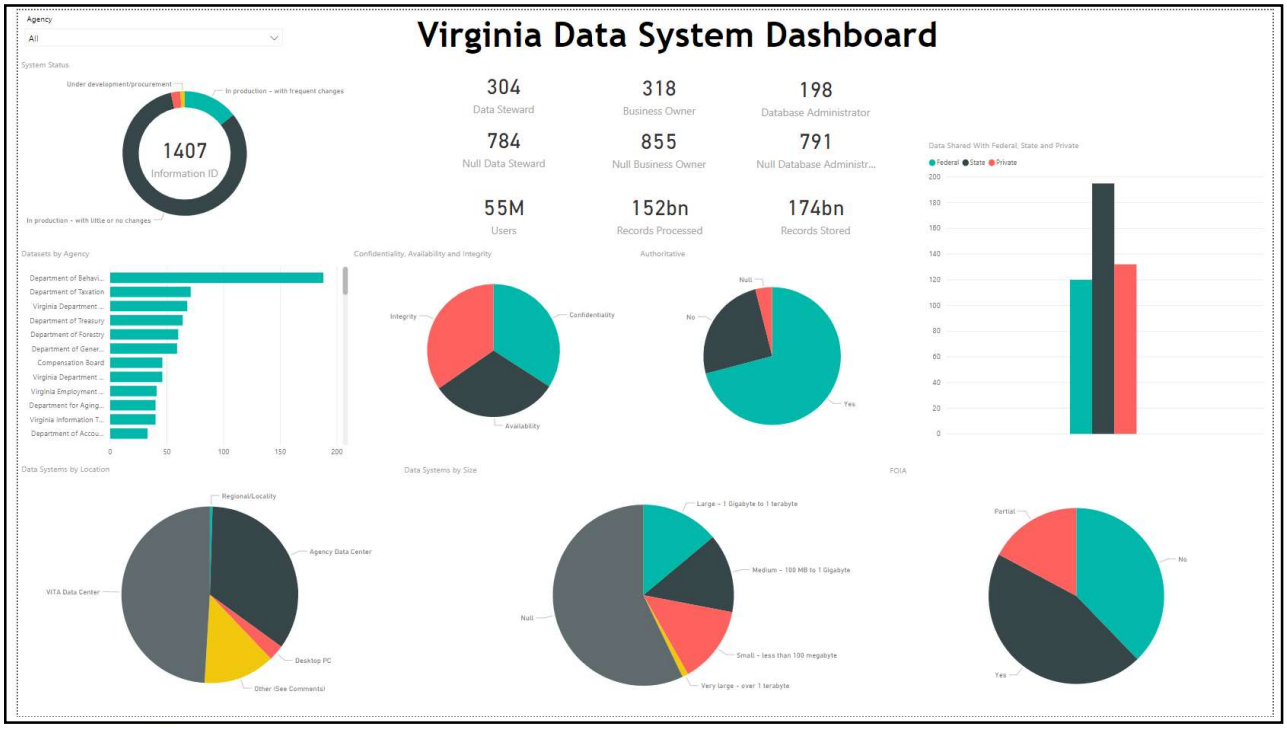
OFFICE OF THE GOVERNOR OF THE COMMONWEALTH OF VIRGINIA

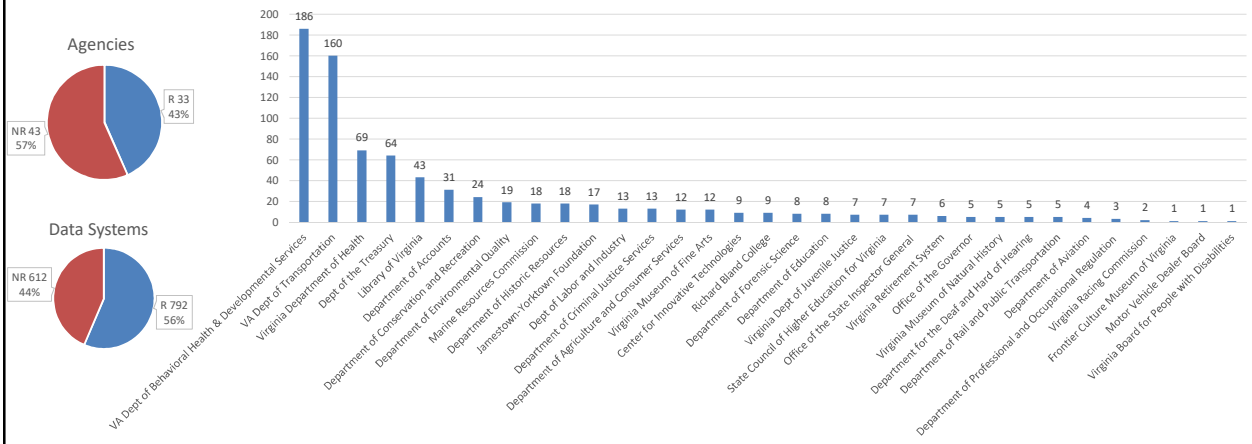
DATA GOVERNANCE

CHIEF DATA OFFICER CARLOS RIVERO



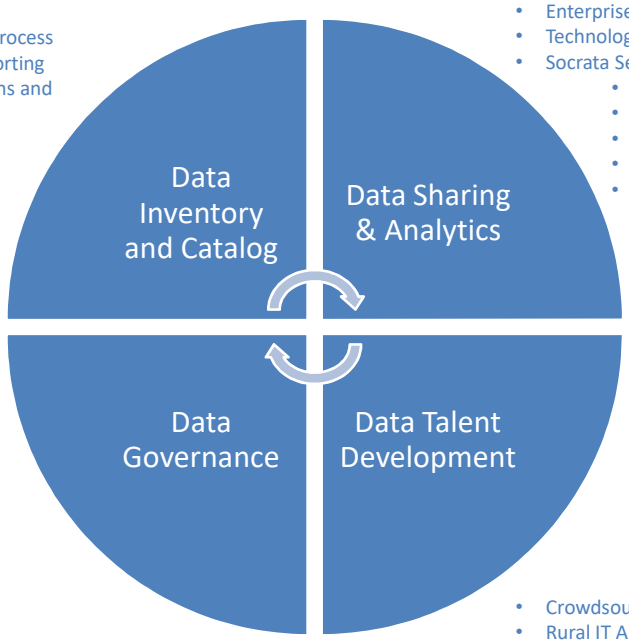
OFFICE OF THE GOVERNOR OF THE COMMONWEALTH OF VIRGINIA

AGENCY DATA STEWARDS RESPONSE



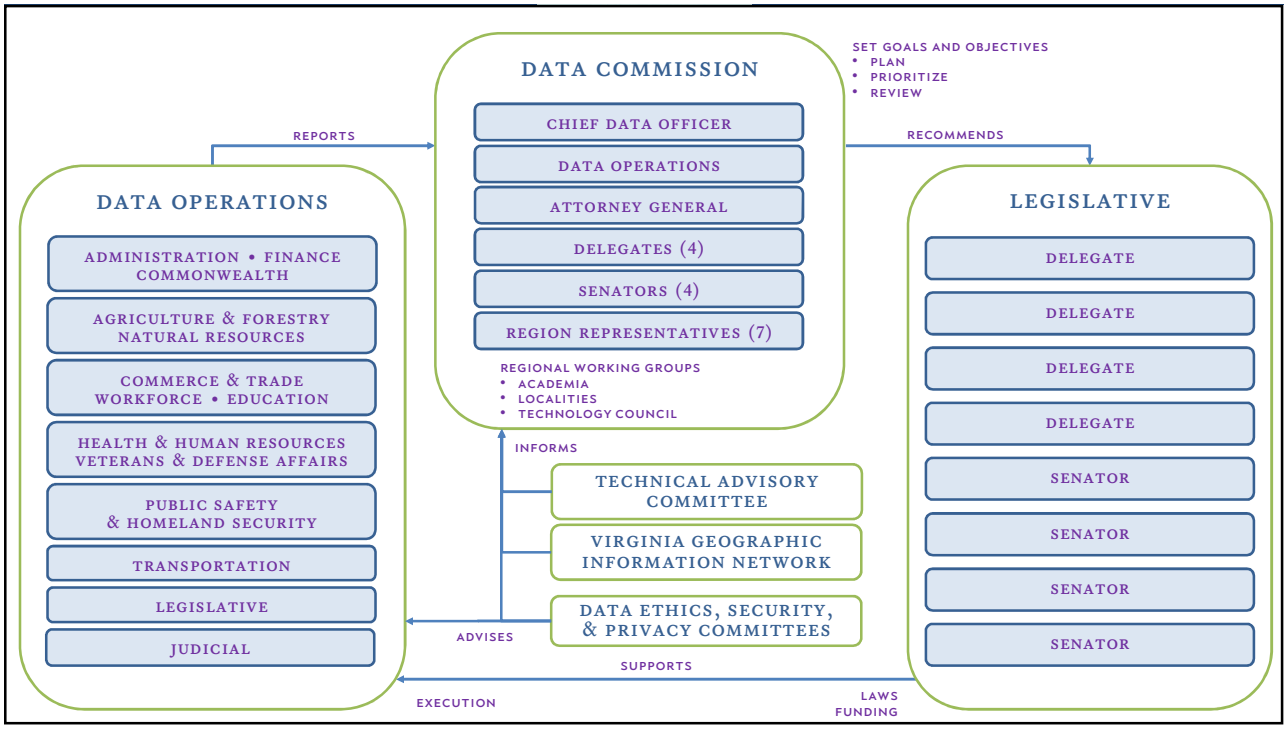
- VDOT Innovation Catalog
- Azure Data Catalog
- Standard Data Documentation Process
- Machine Learning Models Supporting Business Glossary Tag Suggestions and Ontology Development
- Metadata Approval Process
- Metadata Publishing Process

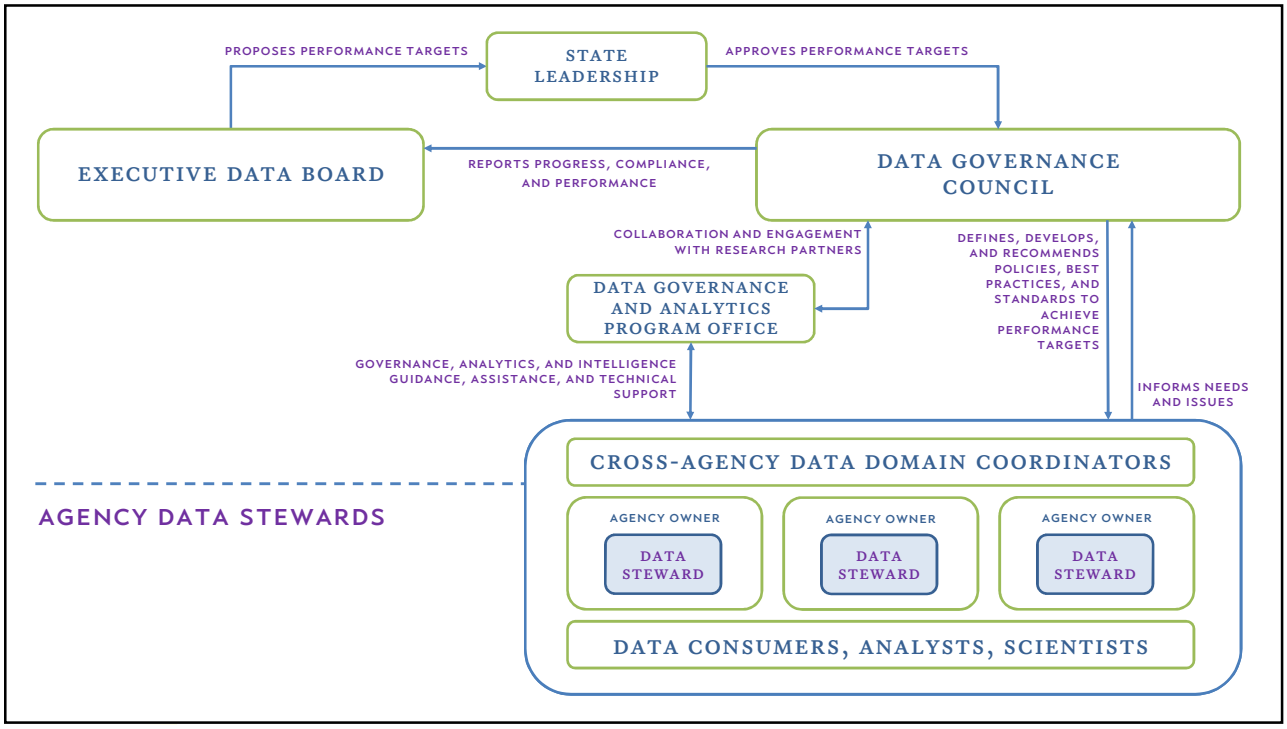
- Opioid Data Sharing Expansion and Report
- Enterprise Data Sharing Agreement Process
- Technology-Agnostic Data Hub Governance
- Socrata Secure Connected Government Cloud
  - VDOT
  - DRPT
  - DMV
  - OIPI
  - VDH

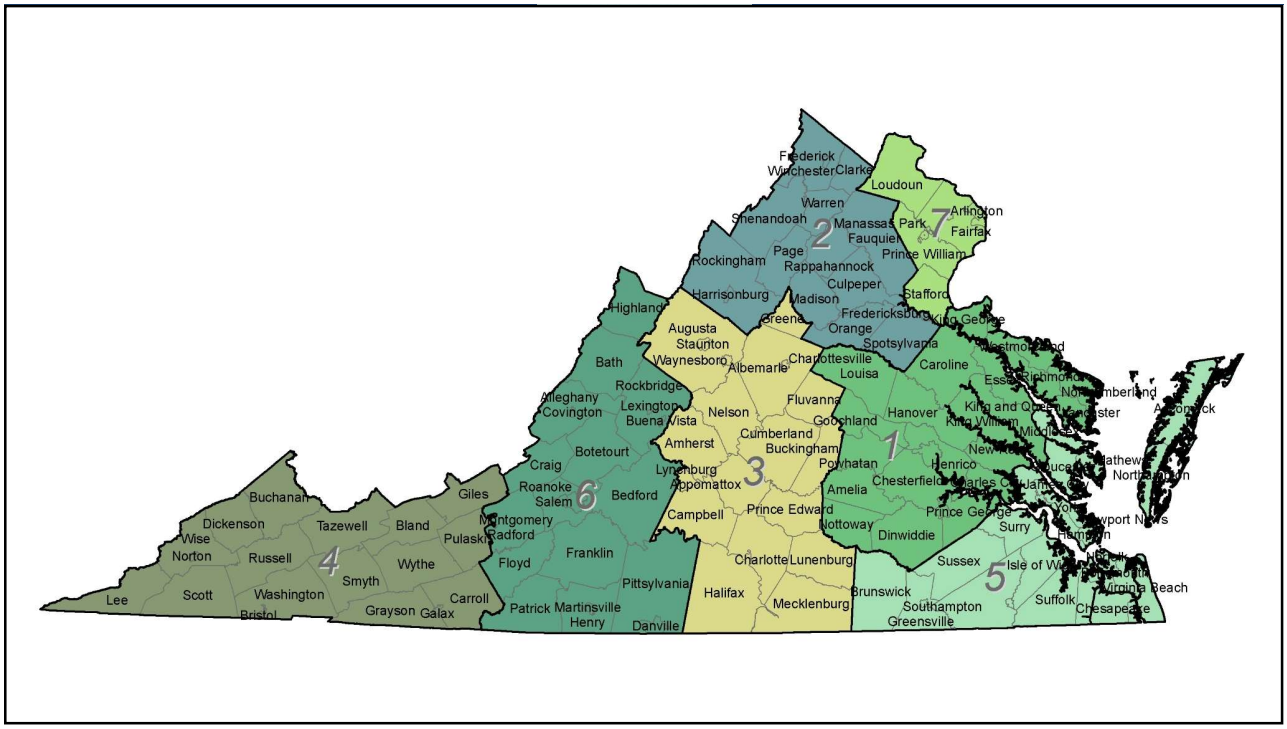


- Data Board
- Data Governance Council
- Data Stewards Group
- Data Sharing and Analytics Advisory Committee Report

- Crowdsource Broadband Performance
- Rural IT Apprenticeship Program
- Commonwealth Data Internship Program


DATA COMMISSION
SET GOALS AND OBJECTIVES
• PLAN
• PRIORITIZE
• REVIEW
CHIEF DATA OFFICER
DATA OPERATIONS
ATTORNEY GENERAL
DELEGATES (4)
SENATORS (4)
REGION REPRESENTATIVES (7)
REGIONAL WORKING GROUPS
• ACADEMIA
• LOCALITIES
• TECHNOLOGY COUNCIL
REPORTS
RECOMMENDS
DATA OPERATIONS
ADMINISTRATION • FINANCE COMMONWEALTH
AGRICULTURE & FORESTRY NATURAL RESOURCES
COMMERCE & TRADE WORKFORCE • EDUCATION
HEALTH & HUMAN RESOURCES VETERANS & DEFENSE AFFAIRS
PUBLIC SAFETY & HOMELAND SECURITY
TRANSPORTATION
LEGISLATIVE
JUDICIAL
LEGISLATIVE
DELEGATE
DELEGATE
DELEGATE
DELEGATE
SENATOR
SENATOR
SENATOR
SENATOR
INFORMS
TECHNICAL ADVISORY COMMITTEE
VIRGINIA GEOGRAPHIC INFORMATION NETWORK
DATA ETHICS, SECURITY, & PRIVACY COMMITTEES
ADVISES
SUPPORTS
EXECUTION
LAWS
FUNDING


PROPOSES PERFORMANCE TARGETS
STATE LEADERSHIP
APPROVES PERFORMANCE TARGETS
EXECUTIVE DATA BOARD
REPORTS PROGRESS, COMPLIANCE, AND PERFORMANCE
DATA GOVERNANCE COUNCIL
COLLABORATION AND ENGAGEMENT WITH RESEARCH PARTNERS
DEFINES, DEVELOPS, AND RECOMMENDS POLICIES, BEST PRACTICES, AND STANDARDS TO ACHIEVE PERFORMANCE TARGETS
DATA GOVERNANCE AND ANALYTICS PROGRAM OFFICE
GOVERNANCE, ANALYTICS, AND INTELLIGENCE GUIDANCE, ASSISTANCE, AND TECHNICAL SUPPORT
INFORMS NEEDS AND ISSUES
AGENCY DATA STEWARDS
CROSS-AGENCY DATA DOMAIN COORDINATORS
AGENCY OWNER
DATA STEWARD
AGENCY OWNER
DATA STEWARD
AGENCY OWNER
DATA STEWARD
DATA CONSUMERS, ANALYSTS, SCIENTISTS


Frederick
Winchester
Clarke
Loudoun
Warren
Shenandoah
2
Manassas Park
7
Arlington
Fairfax
Fauquier
Page
Prince William
Rockingham
Rappahannock
Culpeper
Harrisonburg
Madison
Stafford
Highland
Greene
Fredericksburg
King George
Orange
Augusta
Staunton
Spotsylvania
Waynesboro
Albemarle
Charlottesville
Louisa
Caroline
Bath
Rockbridge
Alleghany
Covington
Lexington
Buena Vista
Nelson
Fluvanna
Goochland
Hanover
King and Queen
King William
Amherst
Cumberland
Buckingham
1
Powhatan
Henrico
Botetourt
Craig
Lynchburg
Appomattox
3
Chesterfield
Roanoke
Salem
6
Bedford
Amelia
Giles
Buchanan
Prince Edward
Campbell
Prince George
Surry
Dickenson
Tazewell
Bland
Montgomery
Radford
Pulaski
Nottoway
Dinwiddie
Wise
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Russell
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Wythe
Floyd
Franklin
Charlotte
Lunenburg
Sussex
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Smyth
Pittsylvania
Halifax
Brunswick
Virginia Beach
Lee
Scott
Washington
Carroll
Grayson
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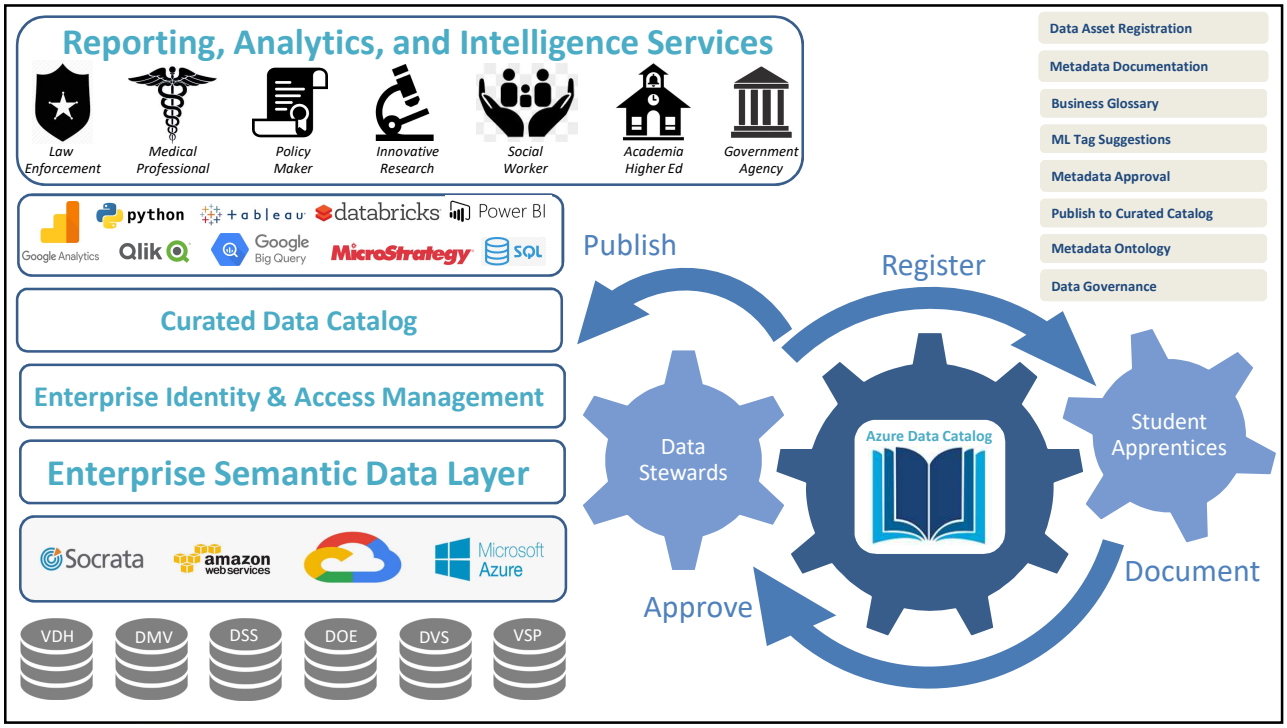
Patrick
Martinsville
Henry
Danville
Mecklenburg
Southampton
Greensville
Suffolk
Chesapeake
Bristol


Reporting, Analytics, and Intelligence Services
Law Enforcement
Medical Professional
Policy Maker
Innovative Research
Social Worker
Academia Higher Ed
Government Agency
Google Analytics
python
tableau
databricks
Power BI
Qlik
Google Big Query
MicroStrategy
SQL
Curated Data Catalog
Enterprise Identity & Access Management
Enterprise Semantic Data Layer
Socrata
amazon web services
Microsoft Azure
VDH
DMV
DSS
DOE
DVS
VSP
Data Asset Registration
Metadata Documentation
Business Glossary
ML Tag Suggestions
Metadata Approval
Publish to Curated Catalog
Metadata Ontology
Data Governance
Publish
Register
Data Stewards
Azure Data Catalog
Student Apprentices
Approve
Document

COMMONWEALTH DATA COMMISSION

- Executive Branch (Advisory)
- 25 members (8 legislative, 7 citizen, 10 state officials)
- Study, report, advise, and make recommendations to the Governor and the General Assembly on all areas of data governance, quality, sharing, analytics, and performance management
- Cooperate with the Legislative Branch of State Government, the Attorney General's Office, and the judiciary
- Study the operations, management, jurisdiction, powers, and interrelationship of any such department, board, bureau, commission, authority, or other agency that has any direct data operation including collection, storage, management, quality, transfer, and analysis

OFFICE OF THE GOVERNOR OF THE COMMONWEALTH OF VIRGINIA

COMMONWEALTH DATA COMMISSION

- Coordinate agency programs and activities, to prevent duplication of functions, and to combine all agency data governance plans into a comprehensive interagency state plan
- Review and comment on annual state budget requests
- Define responsibilities among state agencies for various data governance programs and to encourage data sharing among agencies
- Monitor the data governance, sharing, and analytics development efforts of other states and nations
- Develop recommendations that will assist in making Virginia a national leader in data-driven policy and evidenced-based decision making
- Staff assistance shall be provided to the Commission by …

DATA OPERATIONS

Recommended organizational structure to support data governance, sharing, and analytics within operational units including Executive, Legislative, and Judicial branches of state government

- Executive Data Board
- Data Governance Council
- Data Stewards Group
- Data Analytics, Innovation, and Performance Management

EXECUTIVE DATA BOARD

- Set strategic performance objectives
- Advocate for and allocate program and project resources
- Coordinate, prioritize, and oversee multi-agency data sharing and analytics projects
- Remove barriers to implementation

DATA GOVERNANCE COUNCIL

- Advise the Executive Data Board and the Commonwealth Data Commission on technology, policy, and governance strategies to meet Chapter 679 requirements
- Provide a governance, policy, and technology framework for information sharing, promoting greater utility and accessibility of data assets
- Recommend policies, standards, and guidelines for the formation, operations, and maintenance of the Data Governance Council
- Recommend policies, standards, and guidelines for defining, managing, approving, and implementing 'Open Data' maintained by state agencies
- Report progress, compliance, and performance to the Executive Data Board

DATA GOVERNANCE AND ANALYTICS PROGRAM OFFICE

- Manages the Commonwealth Data Trust
- Advise executive state agencies and political subdivisions regarding state best practices concerning the creation and maintenance of data.
- Coordinate data analytics and transparency master planning for the executive state agencies and provide leadership regarding state data analytics and transparency.
- Collect, analyze, and exchange government information
- Ensure the security of government information
- Conduct the operational and procedural audits of data sharing partners
- Identify data integration and business intelligence opportunities generating greater efficiencies in state agencies, departments, and institutions
- Leverage data from transactional systems for enterprise-level state business intelligence
- Ensure data integration and sharing is performed in a manner that preserves data privacy, security, and confidentiality in transferring, storing, and accessing data, as appropriate

DATA STEWARDS GROUP

- Promote and facilitate the secure and appropriate sharing and use of data assets in support of data-driven policymaking, research, analysis, study, and economic development
- Maximize the value and utility of Commonwealth data-related investments and assets
- Promote increased sharing of data between state agencies and localities to provide tangible operational improvements to assist state agencies and localities in fulfilling their respective missions in a coordinated, cost-effective manner
- Provide public access to data assets, where lawful and appropriate, to enhance research, innovation, and insight