

PL 2021 Chapter 717 – An Act to Promote Equity in Policy Making by Enhancing the State’s Ability to Collect, Analyze and Apply Data

2024 Annual Report

March 15, 2024

Presented to:

Joint Standing Committee on State and Local Government

Presented by:

Department of Administrative and Financial Services

Janet T. Mills
Governor



Kirsten LC Figueroa
Commissioner

Introduction

Public Law 2021 Chapter 717 requires that “the Secretary of State, or the secretary’s designee, the Chief Information Officer and the Permanent Commission on the Status of Racial, Indigenous and Tribal Populations established by Title 5, section 12004-J, subsection 19 shall jointly report on the status of the program and the consultations under subsection 3 to the joint standing committee of the Legislature having jurisdiction over state and local government matters annually by February 15.” An extension has been requested and granted for this report to be submitted by March 15, 2024.

Reports from each entity are being submitted under separate cover.

DAFS Executive Summary

During the 130th Legislature, the legislature passed, and Governor Mills signed into law, Public Law Chapter 717, establishing a Data Governance Program. The Data Governance Working Group was established in February 2023. The following is the required report covering the period of March 2023 through January 2024.

Companion legislation, LD 1948, “An Act to Amend the State’s Data Governance Program Regarding Proprietary Data,” was introduced during the 131st Legislature. LD 1948 would replace all instances of “Chief Information Officer” with “the Commissioner of the Department of Administrative and Financial Services, or the commissioner’s designee,” and provide additional direction on the following matters:

- The Data Governance Program will adhere to the records retention schedule created by the State Archivist.
- Departmental data stewards will be responsible for complying with the Data Governance Program.
- DAFS Commissioner or their designee will work with departments to create a statewide inventory of demographic data.
- DAFS Commissioner or their designee will develop definitions and standards for demographic data and consult with the Office of the Secretary of State and the Permanent Commission on the Status of Racial, Indigenous and Tribal Populations to convene a stakeholder group at least annually to review the progress and development of the Data Management and Governance Practice.
- DAFS Commissioner or their designee will consider racial, ethnic, gender, socioeconomic and demographic diversity in the composition of the stakeholder group.

Foundational work performed by the Working Group or specifically by DAFS has begun or will begin this year to move the State of Maine forward including:

- Establish Data Management and Governance Practice.
- The Chief Data Officer will work with Gartner Consulting and MaineIT to create state-wide data policies and standards for four data domains including Quality, Metadata, Interoperability, and Reference/Master Data.
- DAFS to coordinate, identify and recruit “Departmental Data Stewards” to organize Data Governance efforts within each Executive Branch agency.
- Host a series of interactive workshops and discussions to educate departmental data stewards.

- DAFS will conduct a statewide data inventory coordinated by the Chief Data Officer.
- DAFS will research and propose definitions and standards for demographic data. The research and proposal will be coordinated by the Chief Data Officer, who will submit them to the Working Group for review and approval. The Working Group will sign off on the final recommendation. This will include, but not be limited to, those specifically required by LD 1948, “An Act to Amend the State’s Data Governance Program Regarding Proprietary Data”:
 - Gender
 - Location
 - Race
 - Ethnicity
 - Birth Sex
 - Socioeconomic Status
 - Education
 - Sexual Orientation
 - Veteran’s Status
 - Disability
 - Age
 - Citizenship
- DAFS has launched a pilot program for the Data Management and Governance Practice with our multiple divisions.
- The Working Group will continue to meet quarterly to track the development of the Data Management and Governance Practice.
- The Working Group will submit an annual report to the Legislature in February 2025 with updates and recommendations.

The Data Governance Working Group includes the following participants:

- Department of Administrative and Financial Services
 - Commissioner, Kirsten LC Figueroa
 - Director of Operations, Michael Cornwell
 - Chief Data Officer, Ken Boykin
 - State Economist, Amanda Rector
 - Data Communications Specialist, Laura Yeitz
- Permanent Commission on the Status of Racial, Indigenous and Tribal Populations
 - Executive Director, Ariel Ricci
 - Research Coordinator, Dr. Leeann Sullivan
- Secretary of State
 - Secretary of State, Shenna Bellows
 - State Archivist, Katherine McBrien
 - Deputy Secretary of State Policy Advisor, Joann Bautista
 - Deputy Secretary of State – Information Services, Chris Johnson
 - Deputy Secretary of State – Equity and Inclusion, Dr. Lelia DeAndrade
 - Director of Digital Services, Lisa Erickson-Harris

Roles and Responsibilities - Department of Administrative and Financial Services

DAFS is responsible for creating and maintaining the statewide Data Management and Governance Practice. The DAFS Commissioner is required by statute ([Title 5, Ch. 13 §282](#)) to provide financial, economic, and demographic data and analyses.

3. Financial data and statistics. To coordinate financial planning and programming activities of departments and agencies of the State Government for review and action by the Governor;
11. Economic and demographic analyses. To conduct studies and continuing economic and demographic analyses of the state economy, including economic and demographic forecasting, and collect, collate and analyze all pertinent data and statistics relating to those studies and analyses to assist the Governor, the Legislature and the various state departments in formulating goals, programs and policies. The commissioner shall make these data and statistics available to the Legislature upon request. All state agencies shall cooperate with the commissioner regarding implementation of the provisions of this subsection. In implementing this subsection, the commissioner may use secondary data made available to the commissioner by other state agencies or other organizations.

The Chief Information Officer is required by statute to develop and administer written standards for data processing and telecommunications and protect information files.

([Title 5, Ch. 163 § 1974](#))

3. Develop and administer written standards for data processing and telecommunications. The Chief Information Officer shall develop and administer written standards for data processing and telecommunications. These written standards pertain to:
 - A. Acquisition of equipment; [PL 2001, c. 388, §14 (NEW).]
 - B. Acquisition of computer software and systems; [PL 2001, c. 388, §14 (NEW).]
 - C. Development of computer systems and computer programs; [PL 2001, c. 388, §14 (NEW).]
 - D. Computer operations; and [PL 2001, c. 388, §14 (NEW).]
 - E. Any other standards determined necessary by the Chief Information Officer and the board. [PL 2001, c. 388, §14 (NEW).]

([Title 5, Ch. 163 §1982](#))

9. Protection of information files. The Chief Information Officer shall develop rules regarding the safeguarding, maintenance and use of information files relating to data processing, subject to the approval of the commissioner. The office is responsible for the enforcement of those rules. All data files are the property of the agency or agencies responsible for their collection and use.

Chief Data Officer

- Operate the statewide Data Management and Governance Practice
- Work with Gartner Consulting to create data management and governance policies and standards
- Consult with MaineIT to ensure that data policies and standards are consistent with MaineIT security, networking, architecture, storage, and other essential functions

- Coordinate with Procurement, the Project Management Office, and MaineIT to ensure that new data systems and technology adhere to data policies and standards, and the essential functions described above
- Meet with and consult DAFS bureaus and offices to create a proof of concept for the Data Management and Governance Practice through a pilot program
- Consult with the Permanent Commission on the Status of Racial, Indigenous and Tribal Populations to promote equity
- Consult with the Bureau of Human Resources' Diversity, Equity, Inclusion, and Belonging Specialist to improve the quality and collection of racial, ethnic, and other demographic data (quantitative and qualitative) to reduce disparities in programs, services, and outcomes
- Coordinate with the State Archivist to ensure the Data Management and Governance Practice accurately reflects records management and retention requirements

MaineIT

- Work with the Chief Data Officer to ensure that data policies and standards are consistent with MaineIT security, networking, architecture, storage, and other essential functions
- Coordinate with Procurement, the Project Management Office, and the Chief Data Officer to ensure that new data systems and technology adhere to data policies and standards, and the essential functions described above

State Economist

- Provide recommendations to the Data Management and Governance Practice for improving quality and availability for all data
- Consult with departments to improve data analytics

Diversity, Equity, Inclusion, and Belonging Specialist (Bureau of Human Resources)

- Consult with the Permanent Commission on the Status of Racial, Indigenous and Tribal Populations to promote equity
- Provide recommendations to the Data Management and Governance Practice for improving quality and collection of racial, ethnic, and other demographic data (quantitative and qualitative) to reduce disparities in programs, services, and outcomes

Project Management Office

- Create and manage DAFS portfolio of enterprise level projects to prioritize and ensure sufficient resources
- Assist the Data Management and Governance Practice with establishing milestones and timelines
- Facilitate organizational change management related to sharing data

Procurement

- Ensure that new data systems and projects utilize the Government Alliance on Race and Equity (GARE) [Racial Equity Toolkit](#) to promote equity in screening and selection
- New data systems must comply with Data Management and Governance policies, standards, and processes once a clear sunset and on-ramp strategy has been provided to departments.

Long-term, DAFS will coordinate these efforts through the Director of Operations, Chief Data Officer, MaineIT, Project Management Office, Procurement, and BHR's Diversity, Equity, Inclusion, and Belonging Specialist. Purchasing technology that promotes shareability of data between systems while ensuring privacy and security is several years away and requires a sunset and on-ramp strategy for existing data systems. Other states have tried and struggled with a purely technological approach.

Data Management and Governance Practice Established:

There are approximately 1,800 disparate data systems used by the State of Maine's various departments, bureaus, offices, and quasi-independent agencies. This number does not include offline databases, hard copy documents, institutional knowledge, or spreadsheets. Much of this data is siloed, and its quality is unknown, thereby preventing the State of Maine from effectively using data to make informed decisions in policy, programs and services to improve the lives of its residents.

The Working Group adopted the mindset that Data Governance and Data Management will be a continuous practice, rather than a singular event. Data Governance refers to policies relating to access and use of data, while Data Management includes the processes, tools, and enabling technology. To reflect this, the term "Data Governance Program" is expanded to the more comprehensive "Data Management and Governance Practice."

When the Data Management and Governance Practice was chaptered into law, the maturity level of existing departmental data policies and processes was unknown. Most agencies are at the beginning process when it comes to data governance but recognize its importance. Together the Working Group will take the learnings from these meetings to inform the State's Data Management and Governance Practice. Such a practice will provide centralized coordination for synchronized data sharing and usage across agencies through a collaborative process; create state-wide policies on data usage, procedures for collecting and sharing data, and ongoing enforcement of established practices; standardize data formats, data categories and technology capabilities across agencies and systems; improve overall data quality; and strike a balance between data collection practices and privacy concerns.

DAFS envisions a Data Management and Governance Practice that allows for the legal and ethical sharing of live data between departments and the public. Examples include racial impact statements, disparate impact statements, data-driven decision making, financial analysis, and grant applications.

Creating a statewide Data Management and Governance Practice is a complex endeavor that will take time and funding. It will be an iterative process marked by continuous improvement. It will not get everything right the first time, but the more frequently data is walked down the path, the greater its value in improving programs, services, and outcomes.

Greater access to quality data can empower decision makers to strive for equity and improve outcomes in program and service delivery. A robust Data Management and Governance Practice intersects with:

- Cybersecurity
- Privacy
- Systems Procurement
- Business Continuity
- Records Retention
- Legislation

- Budgets
- Artificial Intelligence

The establishment of a statewide Data Management and Governance Practice will require a significant investment of time and resources to create policies and standards, conduct outreach with departments, research data sharing restrictions, and ultimately procure enabling technology to share live data between departments and with the public.

DAFS recognizes that this will be as much an organizational cultural change as a technological one. Pursuant to [5 MRS §1982 \(9\)](#) departments own their data. Education and training will be essential for state agencies to understand and embrace the Data Management and Governance Practice. The DMGP pilot through DAFS will show proof of concept and real-world benefits that will help other departments with the transition. As new systems are brought online, siloed data systems will be phased out.

The Working Group will engage with departments in 2024 by facilitating a series of interactive discussions and workshops on Data Governance and how to assess current data capabilities in preparation for a formal data inventory. Parallel to this effort, DAFS will serve as a pilot for the Data Management and Governance Practice by adopting data sharing agreements and applying data policies and standards.

Having an accurate inventory of the types of data the State of Maine’s departments, constitutional offices, and quasi-governmental agencies collect and generate is the first step toward creating a statewide Data Management and Governance Practice. Through policies and standards, DAFS will ensure data consistency and quality so that when an entity retrieves or cites State of Maine data for programs, services, or other purposes, that entity can be confident that the information provided has undergone rigorous inspection. Once those policies and standards for data have been finalized, this data “ideal” will serve as the benchmark for state-wide data including structure, format, categories, capture, accuracy, technology requirements, storage, privacy, security, metadata and other factors.

DAFS will coordinate, identify and recruit “Departmental Data Stewards” within each State of Maine Department. These Data Stewards will spearhead the data inventory process within their departments, bureaus, and agencies and help facilitate all other Data Management and Governance Practice efforts statewide.

DAFS will continue to meet on a quarterly basis with the Secretary of State and Permanent Commission on the Status of Racial, Indigenous and Tribal Populations to consult on records retention and management, and methods to build racial equity considerations into the Data Management and Governance Practice efforts. A report will be provided to the Legislature in February 2025 with DAFS’s findings and progress towards the creation of a statewide Data Management and Governance Practice.

Implementation:

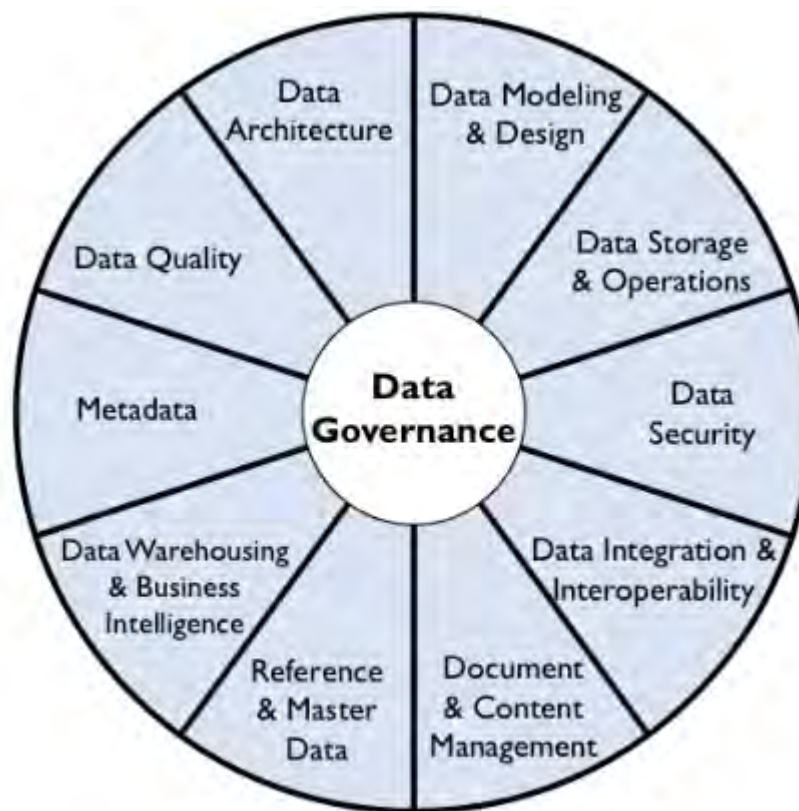
Data Project Priorities –

DAFS will coordinate with the Project Management Office to manage its portfolio of enterprise-level projects, starting in mid-2024. This process was piloted by MaineIT to identify resource constraints and workflow impacts on teams. Adopting this approach will help DAFS manage the State of Maine’s data project priorities.

During its creation, the Data Management and Governance Practice would benefit from the Project Management Office’s expertise in establishing milestones and timelines. This is as much a cultural shift as a technological one.

Ensuring data privacy compliance and that best practices are followed –

The Chief Data Officer recommends adopting the *Data Management Body of Knowledge (DMBOK)* model created by the Data Management Association International as the basis of Data Management and Governance policies, procedures, and best practices. DMBOK consists of 10 data domains. The Chief Data Officer has identified “Ethical Data Handling” as a best practice that connects all data domains, to ensure content neutrality and integrity. Application of the DMBOK model will be reviewed continuously as the work evolves to ensure best practice.



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1. **Data Quality** - The degree to which data is accurate, complete, timely, consistent with all requirements and business rules, and relevant for a given use.
2. **Data Architecture** - In common usage, the physical technology infrastructure supporting data management, including database servers, data replication tools, and middleware. Data Architecture is a framework of rules, policies, models and standards which dictate how an organization stores, manages and integrates data. It dictates how your organization handles all data, while aligning with business, application and technology architectures to achieve organizational objectives.
3. **Data Modeling & Design** - The process of discovering, analyzing, and scoping data requirements, and then representing and communicating these data requirements in a precise form called the data model. This process is iterative and may include a conceptual, logical, and physical model.
4. **Data Storage & Operations** – The design, implementation, and support of stored data to maximize its value throughout its lifecycle, from creation/acquisition to disposal. This includes database support and database technology support.
5. **Data Security** – The planning, development, and execution of security policies and procedures to provide proper authentication, authorization, access, and auditing of data and information assets. This supports the protection of privacy and confidentiality.
6. **Data Integration and Interoperability** – Integration consolidates data into consistent forms, either physical or virtual. Interoperability is the ability for multiple systems to communicate.
7. **Document & Content Management** – Capture, storage, access, and use of data and information stored outside relational databases. Its focus is maintaining the integrity of and enabling access to documents and other unstructured or semi-structured information. Records and archives are subsets of this domain.
8. **Reference & Master Data** – Data that is required across most or all business functions, processes, and systems. Inconsistencies increase costs through duplication and errors. Budget units, merchant category codes, office locations, and tax identification numbers are examples.
9. **Data Warehousing & Business Intelligence** – Data integrated from a range of sources into a common model. Business Intelligence is planning, implementation, and control processes that support employees engaged in reporting, query, and analysis.
10. **Metadata** – “Data about data.” This includes data itself, business processes, infrastructure, workflows, and connections between data and concepts.

DAFS (by way of the Chief Data Officer, in coordination with MaineIT) will create data policies and standards to ensure that Executive Branch departmental data policies and practices comply with Federal law, meet regulatory requirements, are consistent with DMBOK best practices, and that new data systems will promote sharing of data.

DAFS will continue to evaluate its recommendation that a statewide Privacy Officer position be created in DAFS to oversee the intersection between cybersecurity and data governance. Privacy is a function that will provide value to the State of Maine and its residents, independent of the Data Management and Governance Practice, especially as it relates to the transformative potential of generative artificial intelligence. While there is currently a moratorium in place prohibiting the use of generative AI within the State of Maine’s data systems and networks, the expectation is that this technology (in some form) will be incorporated in the State of Maine’s future business models.

Developing data structure policies to ensure quality, alignment and availability across systems –

In 2024, the Chief Data Officer will work with Gartner Consulting to apply the DMBOK model to DAFS's data quality, collection, and *Metadata* standards for structured, unstructured, and Geographic Information System (GIS) data.

This work will lay the foundation for all State of Maine Executive Branch departments to be able to share live data and begins with the creation of policies and standards for four data domains including Data Quality, Metadata, Interoperability, and Reference and Master Data. These data domains were strategically chosen because of the likelihood of providing immediate benefits. Creating data policies and standards becomes progressively less complicated and costly due to the interconnective nature of data domains.

Data Quality is arguably the most significant data domain for promoting trust and enabling data-driven decision making. It is the degree to which data is accurate, complete, timely, consistent with all requirements and business rules, and relevant. In the absence of policies and standards, departments, legislators, and the public do not know the quality of the data or know with certainty that the State of Maine's data is accurate. This lack of consistency may hinder the State of Maine's efforts to secure competitive grants.

Metadata is a broad term that covers numerous aspects of data. It is best described as "data about data," and includes the purpose, date of creation, quality, location, author, file size and name. Much of this information can be de-identified to promote legal and ethical sharing of data.

Interoperability refers to the ability of systems to share data. While it is tempting to jump straight into procuring technology that will enable systems to "talk" to one another, the foundational work of creating policies and standards to ensure that all new technology will support the objective of sharing live, quality data is an essential step. DMBOK provides a proven framework for improving data quality, collection, and sharing. This is in stark contrast to *Integration*, which is the merging of multiple data systems and technologies into one. The sheer number of separate data systems currently in use by departments would make integration significantly more complex and is therefore not recommended. Integration could also increase security vulnerabilities by putting all our data eggs into one basket.

Reference and Master Data is the backbone of all financial systems. If this information is not consistent among all aspects of an organization, essential business functions suffer. Examples include budget units, merchant category codes, payroll information, office locations, and tax identification numbers.

Other states' Data Management and Governance practices have struggled to find their footing, despite a wellspring of political and financial support. This is because their various state departments were not provided with policies, standards, and best practices, or they lacked a cohesive roadmap for sunseting legacy data systems. It is important to note that these setbacks occurred in highly supportive cultures with a "share-first" approach to data. These states have effectively gone back to the drawing board and are now taking the approach outlined herein.

Establishing data-sharing policies and agreements –

[MaineIT's Data Exchange Policy](#) (rev 11.29.23) allows departments to share data for specific purposes by mutual Memoranda of Understanding between authorized data custodians. This Data Exchange Policy is compliant with National Institute of Standards and Technology (NIST) standards and all applicable federal and state laws. This promotes a culture of sharing data when it is legal and ethical to do so. DAFS submits this policy as a template for a universal data sharing agreement. Again, this policy will be reviewed continuously as the work evolves to ensure best practice.

Program Requirements:

Support decision making and improve citizen access to government services -

Access to live, quality data by itself will not necessarily increase the State of Maine's capacity to make data-driven decisions. Gartner Consulting defines *Data Literacy* as, "the ability to read, understand, create and communicate data in context, including an understanding of data sources and constructs, analytical methods and techniques applied, and the ability to describe the use case, application, and resulting value."

Data literacy will be one of the topics discussed during the Working Group's interactive series on Data Management and Governance. The goal will be to show how data collection, quality, and analysis can improve programs, services, and outcomes.

Promote consistent collection of racial and ethnic demographic data -

DAFS, through the Chief Data Officer, will provide definitions and standards for demographic, socioeconomic, and spatial data to promote consistency among departmental data systems. The final recommendations will be reviewed by the Working Group. This will include, but not be limited to, those specifically required by LD 1948, "An Act to Amend the State's Data Governance Program Regarding Proprietary Data":

- Gender
- Location
- Race
- Ethnicity
- Birth Sex
- Socioeconomic Status
- Education
- Sexual Orientation
- Veteran's Status
- Disability
- Age
- Citizenship

It is unknown how many of the 1,800 existing data systems either *do not* or *cannot* track racial, ethnic, or other demographic data relating to disparate outcomes or inequity. As part of its efforts to implement this legislation, DAFS will do an inventory by engaging with departments to ascertain their current collection capabilities for these data.

The kickoff to this project will be an interactive discussion as a component of the workshop series. This will inform a larger data inventory and data cataloging effort between DAFS and departmental data subject matter experts.

If a department's current data systems are incapable of collecting racial, ethnic, or other meaningful demographic data, that department should be given sufficient time to budget for adopting new data systems that can. A successful on-ramp ensures timely compliance and quality. For context, MaineIT estimated that the statewide cost would be \$7.5 Million for all departmental data systems to comply with [Resolves 2023, ch. 76](#), "*Resolve, to Establish a Plan for Adding a 3rd Option for Gender on State Forms.*" This implementation would consist of adding an "X" gender marker. This is a single data field. The inventory report on data collection will attempt to do a similar quantification of timing and resources.

Use evidence-based strategies to improve data collection -

The Chief Data Officer has adopted the *Data Management Body of Knowledge (DMBOK)* model created by the Data Management Association International as the basis of data management and governance policies, procedures, and best practices. DMBOK consists of 10 data domains. The Chief Data Officer has identified "Ethical Data Handling" as a best practice that connects all data domains, to ensure content neutrality and integrity.

Data Management Association International is a not-for-profit organization that promotes the understanding, development, and practice of managing data to support organizations. The National Association of Chief Information Officers (NASCIO) endorses DMBOK as a successful model for data governance. For this reason, several other states have adopted the DMBOK model.

The Chief Data Officer is a member of the State CDO Network and participates in Federal CDO Council working groups. This access allows the State of Maine to remain informed of emerging best practices and stay ahead of the curve in meeting Federal compliance requirements.

The DAFS data inventory process will use a Data Maturity Assessment - a process by which organizations identify current practices and policies, data systems, data inventory, data catalog, and prohibitions and restrictions around legal or ethical sharing of data.

Address technology barriers that restrict the ability of state agencies to share data between agencies -

Throughout 2024, DAFS will meet with departments to discuss the demographic data their existing systems collect as part of the data inventory process. The foundational work of creating data governance policies and standards and conducting data maturity assessments will allow the State of Maine to create a sunset and on-ramp strategy for replacing existing technology that cannot collect racial, ethnic, or other meaningful demographic data. MaineIT will coordinate with Procurement to ensure that new data systems promote interoperability.

[Prohibitions and Restrictions](#) refer to the laws, policies, and other safeguards or barriers that prevent a department from sharing data. While these are not technological barriers, they often drive technology procurement and projects and reflect departmental culture. It is possible that while conducting Data Maturity Assessments, departments may discover that some of their long-held prohibitions and restrictions are based on best practices or folklore wisdom passed down from one leader to another, rather than legal requirements.

Procuring enabling technology to allow disparate data systems to share live data is the final phase in creating a statewide Data Management and Governance Practice. Realistically, it will take several years for the State of Maine to be ready for this step.

Create models for sharing data with the public and for developing policies to reduce disparities and increase equity –

Within DAFS, the Chief Data Officer, Project Management Office and Procurement have adopted the Government Alliance on Race and Equity (GARE) [Racial Equity Toolkit](#). This allows departments to consider racial equity in all stages of the decision-making process for creating and amending data policies and procedures, as well as procuring new technology.

By reviewing data management and governance policies quarterly with input from the Permanent Commission on the Status of Racial, Indigenous and Tribal Populations, DAFS Bureau of Human Resources DEI Specialist, and State Economist, the Data Management and Governance Practice will continuously improve its capability to promote equity in decision-making to improve outcomes for the residents of Maine in a wide array of programs and services, such as housing, healthcare, and employment.

Include records management capabilities and compliance –

The Data Management and Governance Practice will adopt the records management and retention requirements as created by the State Archivist, pursuant to Title 5, section 95-C. The Chief Data Officer will meet with the State Archivist at least quarterly to ensure that the Data Management and Governance Practice accurately reflects records management and retention requirements.

Ensure that data sharing and usage complies with state and federal laws, rules and regulations -

The MaineIT Data Exchange Policy referenced above complies with all Federal laws, rules, and regulations. This includes but is not limited to: HIPAA and FERPA. The coordination between Cybersecurity, Privacy, and Data Management and Governance will ensure that data is safe, secure, and compliant.

Consultations:

The Working Group met eight times during 2023. Meetings were held monthly from July through December. Each meeting was attended by representatives from the Secretary of State (including State Archivist), Permanent Commission on the Status of Racial, Indigenous and Tribal Populations and DAFS (State Economist, Chief Data Officer, and Director of Operations). Additional Working Group members joined between May 2023 and September 2023.

To be successful, the Data Management and Governance Practice must:

1. Focus on quality and consistency to promote trust and confidence in the State of Maine's data.
2. Share live data across state government and with the public to improve programs, services, and outcomes.
3. Expand the State's ability to collect demographic data, such as race and ethnicity.
4. Provide an on-ramp and sunset strategy for data systems.
5. Educate state departments and the public about how to interpret data.

As part of its ongoing work, the Working Group will finalize a Mission and Vision Statement. Additionally, it will coordinate to provide a series of interactive workshops outlining the importance of a comprehensive Data Management and Governance Practice. These sessions will include straight talk about data definitions and collections, challenges and opportunities to sharing data, the importance of data standards and consistency, how data and records interrelate, the importance of privacy, the inventory project DAFS will undertake, and the digital efforts of Maine State Archives. This series will also help identify the Department Data Stewards who will shepherd this process for state agencies and quasi-state entities.

Roadmap for 2024

Determine State-Wide Data Policies

DAFS, through the Chief Data Officer will work with Gartner Consulting and MaineIT to Create state-wide data policies and standards for four data domains including Quality, Metadata, Interoperability, and Master/Reference Data. These policies and standards will be shared with the Working Group during quarterly meetings and with the Legislature as part of the annual report. There will be a website with this information that Department Data Stewards will access, that IT Procurement will refer bidding vendors to, and that will be consistently updated as the State's Data Governance and Management Practice evolves.

Define Data to be Captured

DAFS, through the Chief Data Officer will provide definitions and standards for demographic, socioeconomic, and spatial data to promote consistency among departmental data systems. The final recommendations will be reviewed by the Working Group. This will include, but not be limited to, those specifically required by LD 1948, "An Act to Amend the State's Data Governance Program Regarding Proprietary Data":

- Gender
- Location
- Race
- Ethnicity
- Birth Sex
- Socioeconomic Status
- Education
- Sexual Orientation
- Veteran's Status
- Disability
- Age
- Citizenship

It is unknown how many of the 1,800 existing data systems either *do not* or *cannot* track racial, ethnic, or other demographic data relating to disparate outcomes or inequity. As part of its efforts to implement this legislation, DAFS will complete an inventory by engaging with departments to ascertain their current collection capabilities for these data. The kickoff to this project will be an interactive discussion as a component of the workshop series. This will inform a larger data inventory and data cataloging effort between DAFS and departmental data subject matter experts.

Identify and Recruit Stewards from all Departments in State Government

The Working Group will identify and recruit “Departmental Data Stewards” within each State of Maine Department. These Data Stewards will spearhead the data inventory process within their departments, bureaus, and agencies and help facilitate all other statewide Data Management and Governance Practice efforts.

Develop, Create and Present a Series of Interactive Workshops

The Working Group will engage with departments in 2024 by facilitating a series of interactive discussions and workshops on Data Governance as a whole, and how to assess current data capabilities in preparation for a formal data inventory. Topics and the number of interactive workshops are still to be determined.

Conduct a Thorough Data Inventory Across all Departments

Having an accurate inventory of the types of data the State of Maine’s departments, constitutional offices, and quasi-governmental agencies collect and generate is the first step toward creating a statewide Data Management and Governance Practice. A robust Data Governance and Management Practice means that, through transparent policies and standards, when an entity retrieves or cites State of Maine data for programs, services, or other purposes, that entity can be confident that the information provided is both consistent and of the highest quality. Once those policies and standards for data have been finalized, this data “ideal” will serve as the benchmark for state-wide data including structure, format, categories, capture, accuracy, technology requirements, storage, privacy, security, metadata, and other factors.

DAFS, through the Chief Data Officer will coordinate the Departmental Data Stewards to conduct a thorough data inventory process called a Data Maturity Assessment - a process by which organizations identify current practices and policies, data systems, data inventory, data catalog, and prohibitions and restrictions around legal or ethical sharing of data.

DAFS Pilot of Data Management and Governance Practice

As of February 15, 2024, the Chief Data Officer conducted outreach with most DAFS bureaus and offices to kick off the Data Management and Governance pilot. Next will be the inventory process. Future discussions will focus on how access to better quality data can support the top 3 mission-essential functions of DAFS bureaus and offices, followed by implementing policies and standards. Lastly, the adoption of data sharing agreements will occur within DAFS to promote the legal and ethical exchange of live data. Both Procurement and the Project Management Office will support the Data Management and Governance Practice by ensuring that new data systems and projects utilize the Government Alliance on Race and Equity (GARE) [Racial Equity Toolkit](#) to promote equity in screening and selection. New data systems must comply with Data Management and Governance policies, standards, and processes once a clear sunset and on-ramp strategy has been provided to departments.

Working Group to Continue to Meet Quarterly

DAFS will continue to meet on a quarterly basis with the Secretary of State and Permanent Commission on the Status of Racial, Indigenous and Tribal Populations to consult on records retention and management, and methods to build racial equity considerations into the Data Management and Governance Practice efforts, respectively. A report will be provided to the Legislature in February 2025 with DAFS’s findings and progress towards the creation of a statewide Data Management and Governance Practice.

Report to the Legislature

The Working Group will submit a report to the Legislature in February 2025 with Data Management and Governance updates and recommendations.

Roadmap for 2025 and Beyond

1. Phased approach to conducting Data Maturity Assessments for all departments.
2. Departments enter into data sharing agreements.
3. Sunset and on-ramp strategy is implemented to ensure that new data systems are consistent with Data Management and Governance Practice policies and standards. This establishes targets and milestones for replacing legacy data systems and allows departments to budget for these costs.
4. Enabling technology is procured to facilitate sharing of live data between departments and with the public while observing prohibitions and restrictions.

Long-term, DAFS will coordinate these efforts through the Chief Data Officer, MaineIT, Project Management Office, and Procurement. Purchasing technology that promotes shareability of data between systems while ensuring privacy and security is several years away and requires a sunset and on-ramp strategy for existing data systems. Other states have tried and struggled with a purely technological approach.

Future Funding Needs

Departments will need time to budget for replacing legacy data systems. A sunset and on-ramp strategy is essential for true interoperability and data sharing among the State of Maine's various data systems.

Hiring a consultant to assist the Chief Data Officer with the departmental data maturity assessments, gap analyses, and improve data collection will support a phased approach for preparing departments for sharing data and realizing the potential of having access to quality statewide data. Gartner Consulting has been selected to assist with creating four of the ten data standards in 2024.

Additional staff will be needed to support the Chief Data Officer throughout the creation and operation of the Data Management and Governance Practice.

DAFS recommends the creation of a statewide Privacy Officer position within DAFS to focus on protection of programmatic and personal data (residents and employees) from unauthorized access adding value beyond the Data Management and Governance Practice. Grade and job description to be developed through BHR. Privacy Officers typically create policies and procedures for PII/PHI. This would mean working with departments to ensure a consistent and ethical approach to sensitive data. Additional responsibilities include risk mitigation plans for data breaches, conversations with healthcare entities about informed consent, and creating/maintaining data breach notifications (either as law or best practice). The duties and details of this position will be finalized over the year as more information is gleaned from the statewide Data Maturity effort.

Future Legislative Considerations

Proposed legislation LD 1948, “An Act to Amend the State's Data Governance Program Regarding Proprietary Data,” will replace references to the “Chief Information Officer” with “DAFS Commissioner, or their designee,” if it becomes chaptered law.

Glossary of Terms

Data Catalog - collection and classification of metadata

Data Governance - the ability to use demographic, socioeconomic, and spatial data to make better-informed policy decisions for programs and services

Data Inventory – types of data an organization currently collects, and what data it needs, but does not currently collect

Data Literacy - the ability to read, understand, create and communicate data in context, including an understanding of data sources and constructs, analytical methods and techniques applied, and the ability to describe the use case, application, and resulting value

Data Management - the processes, tools, and enabling technology that support Data Governance

Data Maturity – level of sophistication of an organization’s data management and governance policies, procedures, and practices. In the absence of written policies and procedures, it defaults to what is actually being done

Data Maturity Assessment – process by which organizations identify current practices and policies, data systems, data inventory, data catalog, and prohibitions and restrictions around legal or ethical sharing of data

Data Quality - The degree to which data is accurate, complete, timely, consistent with all requirements and business rules, and relevant for a given use

DMBOK – Data Management International’s Data Management Body of Knowledge model. It contains 10 core domains:

- Data Quality
- Data Architecture
- Data Modeling and Design
- Data Storage and Operations
- Data Security
- Data Integration and Interoperability
- Document and Content Management
- Reference and Master Data
- Data Warehousing and Business Intelligence
- Metadata

Gap Analysis - comparison between the current state of an organization's data management and governance policies and practices and its aspirational state

Integration – unification of multiple data systems and technologies into one. Although some integration will occur, this will not be DAFS's primary approach as there are currently over 1,800 disparate data systems, and centralizing all of this data into a single entity would likely create a security concern

Interoperability - the ability of disparate data systems to work effectively together and share data. DAFS's vision of the Data Management and Governance Practice is to support interoperability among the State's various data systems, rather than merge them into one (integration)

Metadata – "Data about data." This includes the purpose, date of creation, quality, location, author, file size and name. Much of this information can be de-identified to promote legal and ethical sharing of data.

Prohibitions and Restrictions - the laws, policies, and other safeguards or barriers that prevent an organization from sharing data