



# LAC Data Strategy

## Library and Archives Canada

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DISCOVER. UNDERSTAND. CONNECT.



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## Introduction

The initial LAC Data Strategy, published in 2019, was Library and Archives Canada's (LAC) response to the Government of Canada Data Strategy outlined in the Report to the Clerk of the Privy Council: [A Data Strategy Roadmap for the Federal Public Service](#) (2018). All departments, agencies or portfolios were invited to develop data strategies that were relevant, scaled and customized to their needs, in order to:

- Ensure greater clarity on who is in charge of data within individual organizations and for the government as a whole
- Ensure there are overall standards and guidelines governing how departments access, collect, use, safeguard and share data, and a clear process for refining these over time
- Clarify data governance to ensure that the Government of Canada manages data for the public good
- Improve recruitment and professional development practices to ensure that the Government of Canada has the skilled people it needs to do data work in a digital environment
- Ensure that the Government of Canada has an environment that allows skilled professionals to use disruptive technologies to support the ambitious agenda outlined in the Government of Canada data roadmap

Since 2018, the federal data landscape and the government's priorities have evolved. In June 2022, the Government of Canada undertook to renew its data strategy to emphasize the priorities and actions that will bring data management into the future. The renewed Government of Canada Data Strategy is framed around four mission statements:

- Mission 1: Data by design
- Mission 2: Data for decision making
- Mission 3: Enabling data-driven services
- Mission 4: Empowering the public service

Similarly, LAC's context has evolved, marked by new ways of working post-pandemic, the appointment of a Chief Information Officer and Chief Data Officer (CIO-CDO), and the development of a strategic plan, [Vision 2030](#), which will guide the organization in the coming years. Vision 2030 revolves around the statement *Discover. Understand. Connect*. It has four key elements:

1. Inviting users to discover the collections
2. Reflecting diverse voices
3. Engaging with the community, partnering with the world
4. Supporting our people, sustaining our heritage

These factors prompted LAC to revise its own data strategy to better align it with the organization's current priorities and those of the Government of Canada. The revised LAC Data Strategy strengthens the principles and goals set out in the initial version

(2019) (refer to Appendix A, [LAC Data Strategy Framework graphic](#)) to allow LAC to achieve the desired outcomes stated in Vision 2030.

## Background

### Why is LAC different?

LAC has the legal mandate to acquire, process, preserve, and provide access to Canada’s documentary heritage, as well as to serve as the continuing memory of the Government of Canada and its institutions. This results in the creation of vast collections for which LAC is responsible.

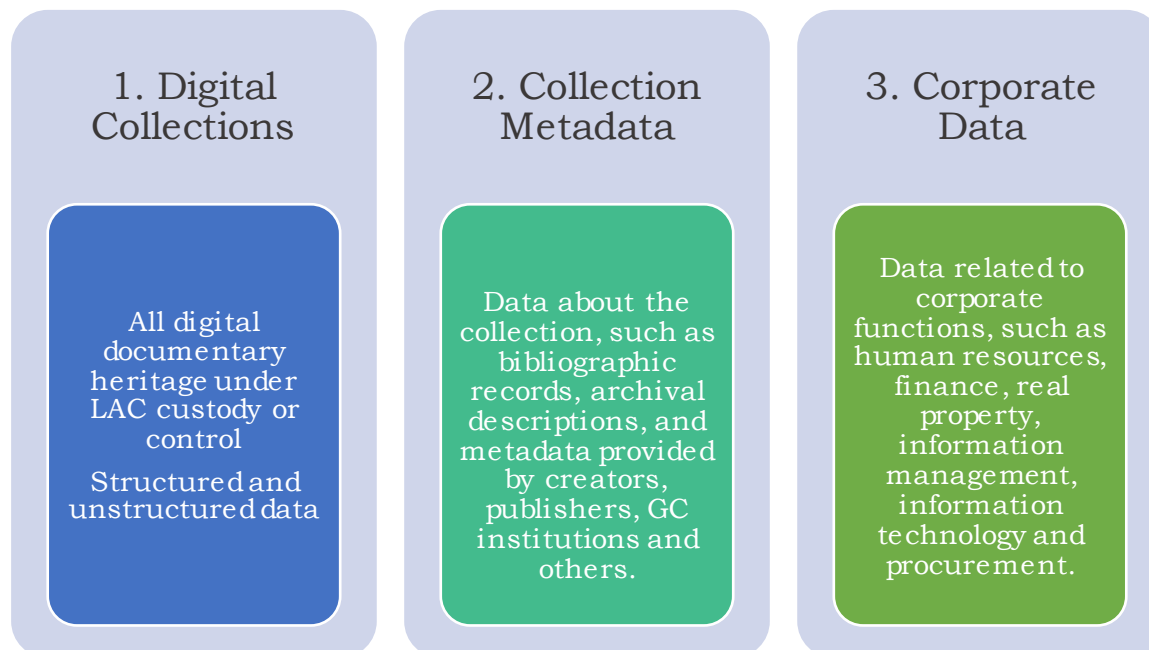
In addition, LAC collects, creates, uses and shares data through its own corporate operations (human resources, finance, real property, reports to parliament, etc.) and its program operations.

LAC has to manage not only its own corporate data but also its collections data as well as the metadata describing these collections.

### What does data mean in the context of this strategy?

The choice was made not to segregate data types in the LAC Data Strategy, in order to better leverage LAC’s different data sets, regardless of where they come from.

The word “data” in this strategy refers to all digital content under LAC custody or control, both structured and unstructured. This data consists of digital collections, collection metadata, and corporate data.



Data Types in LAC’s Data Strategy

The data types and specificities will be addressed in the detailed action plan that will support the strategy implementation.

## **What does user mean in the context of this strategy?**

In the context of this strategy, a “user” is a person or an organization using, contributing, or requesting access to any of LAC’s data. This term refers to users, stakeholders, partners, Government of Canada departments and agencies, service providers, and employees. The concept of user can be extended to a machine when it comes to applying innovative data management tools based on artificial intelligence or machine learning, for example.

## **Current Challenges**

LAC faces challenges that will affect the implementation of this data strategy and the organization’s capacity to reach its goals.

### **Volume of data**

Given its legal mandate, LAC has to manage not only its own corporate data, but also all the data acquired, created and preserved in its very large collection. This results in an exponential growth of data that is not necessarily supported by an increase in the financial capacity of the organization. At the same time, providing access to this data in a user-friendly way while maintaining the appropriate security levels and restrictions is a challenge.

### **State of data**

The absence of an exhaustive inventory of all of LAC’s data limits the extent to which this data can be accessed and used, and restricts LAC’s ability to generate insights from the data. This results in a general lack of knowledge about the state of data in the organization overall. In addition, there is a growing need for technical knowledge and digital competencies across the institution. This directly affects LAC’s capacity to acquire, leverage, use, share, protect, preserve, and provide access to its data.

### **Lack of coordination and existing silos**

The diverse collections data (media, format, published, unpublished, etc.) and the wide range of related metadata make it necessary for LAC to use different types of resources to steward the collection. This may lead to a lack of common direction with respect to data governance, inefficiency, and a less holistic approach within LAC.

Several silos exist within LAC. Data is not created, acquired and used in the same way within all sectors or, in some cases, within the same team. Knowledge and tools are shared differently across the institution. As well, interoperability is difficult to achieve between the different data sets. This directly affects LAC’s capacity to leverage its data.

## Tools and resources

LAC is currently not equipped to provide its employees and users with the tools they need to manage and use its data in support of their goals. This directly affects LAC's capacity to acquire, leverage, share, protect and preserve its data.

## Usability and sustainability of data

Some of LAC's existing data is unusable because it is unreadable or not accessible by any systems or search engines. Collections data and metadata outlive the digital systems used to manage them. This results in a perpetual need for system migration, checks, data cleaning, etc. Collections data also requires active digital preservation measures in the long term given that LAC serves as the memory of the Government of Canada.

For example, some of LAC's data fields are not used correctly, and some data is not organized as it should be in order to be searchable. The limitations of the existing systems have made it necessary to convert this data into a digitally usable format in order to improve users' access to the collections and meet their expectations.

## LAC's Data Strategy Framework

### Vision

LAC is a data-driven organization working for the benefit of present and future generations of Canadians.

- LAC creates, manages and uses its data optimally to support acquisition, long-term preservation, and access.
- LAC makes evidence-based decisions. It leverages the full range of data collected and used, in a horizontal and interoperable way.
- Users discover, understand, and connect with LAC collections, and repurpose data for their own knowledge and needs.

### Mission

Acquire, create, protect, preserve, and provide effective access internally and externally to trusted data.

### Goals

- **Data is trusted:** Data created and made accessible by LAC can be trusted to be what it purports to be because of its reliability, which rests on LAC's acquisition, description, preservation and access processes as well as its secure systems.

- **Data is accessible:** Data is made accessible and as open as possible through intuitive, interoperable, reliable and effective mechanisms. This accessibility feature takes into account the massive amount of LAC collection data in different formats as well as the applicable policies and frameworks with respect to security and privacy.
- **Data is protected and preserved:** Data pertaining to the collections is ingested, processed, stored and managed to ensure its integrity, security and long-term sustainability.
- **Data is usable:** Both internal and external users (other institutions, researchers, developers, etc.) have the necessary information and tools to create, manage, use, re-use and leverage the LAC data they need, while respecting access rights and permissions use.

## Principles

The following guiding principles have been identified to guide LAC in the implementation of its data strategy:

- **Putting users first: Better understand and serve our current and future users.** LAC will continue to improve how it serves its users (current and future) and will leverage data from different sources captured in the different LAC systems, including user-contributed content.
- **Fostering agility and innovation: Build the capacity to adapt to evolving needs and continuously improve.** LAC will continue to foster an organizational culture that supports and promotes agility and innovation in the way that data is created, used, re-used, stored, and shared, while respecting standards and frameworks.
- **Managing data responsibly: Keep in mind privacy and ethical considerations.** LAC will continue to manage data in accordance with all applicable legislation, including privacy laws, and to put ethical considerations at the centre of its data decisions. Where private and personal information is concerned, LAC will consider whether it should—and whether it can—collect and manage such data. LAC will continue to prioritize the preferences of First Nations, Inuit and Métis Nation communities when handling and caring for sensitive material created by or about their respective communities.
- **Collaborating: Work together through data.** LAC will continue to foster internal and external collaboration in order to work horizontally and promote interoperability in the way that data is created, used and shared. As well, LAC will work to better integrate corporate data of long-term value and collections data.
- **Focusing on results: Align efforts in order to generate value.** LAC will continue to ensure that all actions taken internally as part of this strategy are

steered in a common direction—to generate greater value from its data for employees, users, and all Canadians.

- **Building on trust: Apply accepted standards in acquiring, protecting and describing data.** LAC will continue to apply accepted standards and participate in their creation as the foundation for trustworthy data. In addition, LAC will take steps to ensure that the appropriate levels of security for the protection of its data are applied. LAC will strengthen and modernize its archival and bibliographic standards to improve how it describes the increasingly complex digital objects in the collection.

These principles will guide decisions on how to collect, share, and use data.

## Key Components of the LAC Data Strategy

To achieve the goals identified in this strategy, the following four key components must be in place.

### Data governance

LAC needs a flexible and adaptive framework consisting of policies, guidelines, standards, processes and metrics that will enable it to provide the necessary oversight for the proper management, stewardship and use of its data assets.

### Data literacy

LAC needs to enable its workforce to develop and strengthen its data competencies so that it can create, understand, and use data to its fullness.

### Data enablement

LAC needs to provide its workforce as well as users with the appropriate tools and means so that they have easier access to data through better descriptive metadata. Users will be able to contribute, create, use, leverage and make known data in accordance with the applicable security levels.

### Data management

LAC needs to develop a data architecture as well as regulations, practices, procedures, security levels and systems that will support its efforts to (a) properly manage data throughout its entire life cycle and (b) facilitate the development of analytics for better, evidence-based decision making.



## Revisiting the Implementation Priorities

The following actions will remain the basis for the revised strategy. They are key to addressing the current challenges that LAC faces, and will facilitate the rollout of the data strategy as a whole.

### **Data governance**

As an organizational asset, data is a shared responsibility within LAC. The Digital Services Sector has the lead role with respect to ensuring that all actions included in this data strategy are steered in the same direction. LAC's CIO-CDO and its Deputy CIO-CDO will oversee the implementation of the data strategy by developing, and following up on, the action plan. The CIO-CDO will work collaboratively with LAC executives in updating the LAC Management Team by means of an annual report and recommendations on the state of data at LAC.

### **Data inventory**

LAC will continue to improve and share its existing data inventories. This will remain key to improving the management of LAC's data. It is also crucial to building business intelligence across the institution in order to support data-driven decision making and performance measurement.

### **Data stewardship**

While data inventories are being developed, LAC will continue to clarify the ownership, responsibilities and accountabilities with regard to its data across the institution. This will support decision making about data, foster efficiency, and eliminate duplication, misconceptions and misunderstandings.

### **Data literacy**

LAC will identify the core competencies needed to improve data literacy and skills among its workforce. This will allow the continuous training and the development of innovative recruitment strategies to attract talent.

These implementation priorities will be reflected in LAC's Data Strategy Action Plan. The action plan will be developed by the Digital Services sector in consultation with all LAC directors and reviewed annually.

# Appendix A – LAC Data Strategy Framework

<b>VISION</b>	LAC is a <b>data-driven</b> organization working for the benefit of present and future generations of <b>Canadians</b> .
<b>MISSION</b>	Acquire, create, protect, preserve, and provide effective access internally and externally to <b>trusted data</b> .
<b>GOALS</b>	Data is <b>trusted</b> Data is <b>accessible</b> Data is <b>protected</b> and <b>preserved</b> Data is <b>usable</b>
<b>PRINCIPLES</b>	Putting <b>users</b> first Fostering <b>agility</b> and <b>innovation</b> Managing data <b>responsibly</b> <b>Collaborating</b> Focusing on <b>results</b> Building on <b>trust</b>
<b>KEY COMPONENTS</b>	Data <b>governance</b> Data <b>literacy</b> Data <b>enablement</b> Data <b>management</b>