



Summary of the  
**CORPORATE PLAN**  
2021–2022 to 2025–2026

Summary of the  
Operating and Capital Budgets  
2021–2022

## Table of Contents

EXECUTIVE SUMMARY .....	3
1.0 OVERVIEW.....	4
1.1 Main Activities and Principal Programs .....	5
2.0 OPERATING ENVIRONMENT .....	10
2.1 Key Internal Environment Factors.....	10
2.2 Key External Environment Factors .....	10
2.3 Compliance, alignment, audits, and examinations .....	11
3.0 GOALS, ACTIVITIES, RISKS, EXPECTED RESULTS, AND PERFORMANCE INDICATORS .....	13
3.1 Strategic Goal 1: Collaborate to Innovate .....	13
3.2 Strategic Goal 2: Access for All .....	16
3.3 Strategic Goal 3: Strengthen our Foundations .....	18
3.4 Corporate Risks .....	21
4.0 FINANCIAL OVERVIEW .....	23
4.1 Financial Assumptions.....	23
4.2 Financial Statements .....	25
4.3 Operating Budget .....	30
4.4 Capital Budget.....	32

## EXECUTIVE SUMMARY

---

Ingenium – Canada’s Museums of Science and Innovation safeguards the national science and technology collection and operates the Canada Science and Technology Museum (CSTM) the Canada Aviation and Space Museum (CASM) and the Canada Agriculture and Food Museum (CAFM).

Ingenium expands its ability to reach, connect, and engage across Canada, and abroad through outreach initiatives including travelling exhibitions; artifact loans; programming at public events; conference presentations and research publications; digital experiences including virtual exhibitions and tours, games and mobile apps; online platforms; and national awareness programs.

Over 2021-2022, the Corporation will pursue the second year of its new strategic plan 2020-2025, with a focus on carrying out the activities listed under the three strategic goals below:

*Strategic Goal 1 – Collaborate to Innovate:* Ingenium will help Canadians build the confidence and skills they need to become innovators. It will pursue this strategic goal by developing and maintaining sustainable partnerships in the STEAM (science, technology, engineering, arts and mathematics) ecosystem, by engaging audiences on key issues of our time, and by enhancing the Corporation’s offerings with the dimensions of innovation culture (e.g. creative problem-solving, risk-taking, learning from failure).

*Strategic Goal 2 – Access for All:* Ingenium will make its experiences more accessible and meaningful for more audiences, especially those who have traditionally faced barriers. It will pursue this strategic goal by improving the accessibility of its experiences and access to the collection, championing accessibility best practices, developing creative and exploratory digital experiences, and engaging diverse communities – including Indigenous communities – in collaboration and co-creation.

*Strategic Goal 3 – Strengthen our Foundations:* Ingenium will focus on delivering quality visitor experiences and ensuring its long-term sustainability. It will pursue this strategic goal by strengthening its workplace culture, unlocking the Ingenium Centre’s potential, improving the care and research of the national collection, attracting and retaining visitors, pursuing capital investments, increasing the profitability of commercial operations, and growing long-term funding relationships.

To facilitate these strategic goals as well as to continue its ongoing business of operating museums and curating and caring for the national collection across 18 buildings, the majority of the Corporation’s spending will be on salaries and facilities. Its operating budget for 2021-2022 is \$38.942 million on a cash basis and \$51.342 million on an accrual basis, funded from appropriations, revenues, and contributions. This includes the receipt of COVID-19 pandemic relief funding to off-set significant revenue losses from a sharp decline in museum attendance, and for the payments in lieu of taxes (PILT) associated with the new Ingenium Centre. Operating revenues are expected to incrementally recover through 2025-2026.

Ingenium’s capital budget of \$12.8 million (cash basis) for 2021-2022 will be used to complete health and safety-related infrastructure projects, to undertake lifecycle repairs and replacements for capital assets, and for completing the fit-up of the Ingenium Centre and safer site circulation.

The summary reflects the perceived impacts of the COVID-19 pandemic on Ingenium’s plans and resources for 2021-2022, which may change as the situation evolves.

# 1.0 OVERVIEW

The National Museum of Science and Technology<sup>1</sup> was established as a Crown corporation with the passage of the *Museums Act*, 1990. This legislation sets out the public policy role for all national museums, as well as the Corporation’s specific mandate. As cultural Crown corporations, museums operate at arm’s length from government with regard to operating and programming decisions. In addition to its enabling legislation, Part X of the *Financial Administration Act* sets out its authority and accountability framework as an agent Crown corporation.

As a consolidated Crown corporation, Ingenium relies on parliamentary-voted appropriations as its primary source of revenue. The remainder of its operational budget is provided by operational revenues and contributed income. Detailed information is included in Section 4: Financial Overview.

<b>PUBLIC POLICY ROLE</b>	<p>“plays an essential role, individually and together with other Museums and like institutions, in preserving and promoting the heritage of Canada and all its peoples throughout Canada and abroad, and in contributing to the collective memory and sense of identity of all Canadians;” and</p> <p>“is a source of inspiration, research, learning and entertainment that belongs to all Canadians and provides, in both official languages, a service that is essential to Canadian culture and available to all.”</p>			
<b>MANDATE</b>	<p>“To foster scientific and technological literacy throughout Canada by establishing, maintaining, and developing a collection of scientific and technological objects, with special but not exclusive reference to Canada, and by demonstrating the products and processes of science and technology and their economic, social and cultural relationships with society.”</p>			
<b>VISION</b>	Ingenium ignites ingenuity			
<b>MISSION</b>	Ingenium is a catalyst for unlocking the curious and creative minds of a nation of innovators			
<b>VALUES</b>	Creativity	Inclusivity	Collaboration	Accountability

Ingenium’s programs are intended to benefit all Canadians, while primary audiences are families with young children, students, educators, and researchers. It is one of four national museum Crown corporations operating in the National Capital Region (the Canadian Museum of History; the Canadian Museum of Nature; and the National Gallery of Canada). Other federal bodies also deliver science programs, such as the Department of Fisheries and Oceans and the Department of Innovation, Science and Economic Development and its portfolio research agencies. Provincial institutions advance science literacy through science centres, planetariums, and museums.

<sup>1</sup> The Corporation’s commonly used name is Ingenium – Canada’s Museums of Science and Innovation, the name used publicly in communications, other than when the legal name (the National Museum of Science and Technology) is required. “Ingenium” or “the Corporation” refers to the governing body of the museums.

Detailed information about the Corporation’s recent program results can be found in the Corporation’s annual report: <https://ingeniumcanada.org/corporation/annual-report>.

## 1.1 Main Activities and Principal Programs

Ingenium develops and safeguards a national collection of science and technology artifacts and archival materials, which are showcased on a myriad of virtual platforms as well as in the three national museums it operates: the Canada Science and Technology Museum, the Canada Aviation and Space Museum, and the Canada Agriculture and Food Museum.<sup>2</sup> The museums and the collection are housed in 18 buildings at three sites across Ottawa, and include spaces for exhibitions, public and educational program delivery, a research institute focused on science and technology innovation, conservation laboratories, collaborative spaces (that can also be rented), and offices. Beyond the three museums in Ottawa, Ingenium provides unique digital experiences and outreach products that engage Canadians across the country on key issues of our time. The Corporation collaborates with academic, public, non-governmental and industry partners to leverage knowledge, experiences and audiences nationally and internationally, promoting and fostering Canada’s culture of innovation.

### 1.1.1 The Museums

The Canada Science and Technology Museum (CSTM) is Canada’s only comprehensive science and technology museum. It reopened in 2017 to a surge of popularity and very positive reviews. Visitors can engage with 11 permanent exhibitions featuring over 3,000 artifacts, interactive and augmented reality experiences, a maker studio, demo stage, educational and public programs, and temporary exhibit hall.

The Canada Agriculture and Food Museum (CAFM) inspires visitors to engage in a unique experience: a demonstration working farm featuring hundreds of animals including heritage breeds and a dairy operation, as well as an immersive learning experience including a demonstration kitchen and interactive exhibitions. The Museum’s operations and programs showcase the evolution of farming and the important relationships between the environment, science, technology, agriculture and the food and products Canadians consume.

The Canada Aviation and Space Museum (CASM), located next to a working airfield, invites visitors to explore the impact of flight and space exploration on the transformation and development of Canada and the contemporary world. The CASM’s programming and exhibitions bring stories of significant Canadian contributions to aviation and aerospace to life, and stimulates a lasting interest in these fields.

### 1.1.2 The Collection and the Ingenium Centre

Ingenium stewards an extensive collection of scientific and technological objects emblematic of Canadian ingenuity, representing over 116,000 3D parent artifacts and more than 2.1 million 2-D and archival materials. It is particularly rich in the areas of communication, manufacturing, natural and renewable resources, domestic and industrial technologies, scientific instrumentation and transportation. Its aviation collection is deemed among the best in the world. The Corporation curates

---

<sup>2</sup> These museum names appear in the *Registry of Applied Titles*, [www.tbs-sct.gc.ca/fip-pcim/reg-eng.asp](http://www.tbs-sct.gc.ca/fip-pcim/reg-eng.asp). The CSTM’s legal name is the National Museum of Science and Technology; the CASM’s is the National Aviation Museum; the CAFM’s is the Canada Agriculture Museum. “The Corporation” refers to the governing body of the museums.

and conducts research on the collection, resulting in compelling stories of how human innovation contributed to our modern world.

The Ingenium Centre is a purpose-built facility that houses the national science and technology collection, as well as a portion of the National Gallery of Canada collection, in specialized environments to ensure long-term preservation. It reunites the collection with the staff that cares for it, as well as corporate services, leading to more efficient practices and processes as well as opportunities to create new forms of heritage content. A newly established research institute complements the Centre's library and archives, conservation labs, and workshops. Once the collection move is completed, the Ingenium Centre will significantly enhance the care of and access to the collection. Similarly, once the fit-up of the Digital Innovation Lab is complete, partnerships will be leveraged to create new digital content and experiences that will facilitate connections with heritage.

### 1.1.3 Outreach Initiatives

Ingenium's digital and physical outreach initiatives expand its ability to reach, connect, and engage across Canada, and represent Canadian science and technology innovation internationally, including:

- classroom resources and training teachers which support curricula;
- travelling exhibitions, displays, and artifact loans;
- programming at public events (e.g., fairs, libraries);
- community outreach programs;
- conference presentations and research publications sharing expertise;
- science interpretation support for partners (e.g. Department of Fisheries and Ocean's Science Enterprise Centres);
- digital experiences: virtual exhibitions and tours, games and mobile apps;
- online platforms: the Ingenium Channel (an aggregator and interpreter of science and technology information), Open Heritage, Open Archives, and Open Data; and
- a national program: *Women in STEM* (Science, Technology, Engineering, and Mathematics).

### 1.1.4 Corporate Governance Structure

#### Board of Trustees

The *Museums Act* provides for a Board of Trustees, consisting of up to 11 trustees appointed by the Minister of Canadian Heritage with the approval of the Governor in Council. Incumbents continue in office until they resign or a replacement appointment has been made.

The Board serves as Ingenium's governing body and is accountable to Parliament for the affairs of the Corporation through the Minister of Canadian Heritage. The trustees, acting collectively as the Board, are responsible for providing strategic guidance to management and to oversee the business management, activities and affairs of the Corporation, ensuring that all the duties conferred on the Corporation by the *Museums Act* and Part X of the *Financial Administration Act* are carried out.

The full Board meets between four to six times per year. The Board also engages the public on an annual basis, communicating its mandate, priorities, and financial and programming results and plans at the annual public meeting.

<i>Name / Province</i>	<i>Term length</i>	<i>Term period</i>	<i>Biography</i>
Neil Russon, NB Chair	4 years	May 9, 2019 – May 8, 2023	<a href="https://ingeniumcanada.org/corporation/board-of-trustees#neil-russon">https://ingeniumcanada.org/corporation/board-of-trustees#neil-russon</a>
Marian K. Brown, BC Vice-Chair	4 years	June 30, 2019 – June 29, 2023	<a href="https://ingeniumcanada.org/corporation/board-of-trustees#marian-k-brown">https://ingeniumcanada.org/corporation/board-of-trustees#marian-k-brown</a>
Dr. Matthew A. Lafrenière, ON	3 years	May 21, 2019 – May 20, 2022	<a href="https://ingeniumcanada.org/corporation/board-of-trustees#matthew-a-lafreniere">https://ingeniumcanada.org/corporation/board-of-trustees#matthew-a-lafreniere</a>
Dr. Michael Geist, ON	4 years	March 1, 2018 – February 28, 2022	<a href="https://ingeniumcanada.org/corporation/board-of-trustees#drmichael-geist">https://ingeniumcanada.org/corporation/board-of-trustees#drmichael-geist</a>
Christian Idicula, AB	4 years	March 1, 2018 – February 28, 2022	<a href="https://ingeniumcanada.org/corporation/board-of-trustees#christian-idicula">https://ingeniumcanada.org/corporation/board-of-trustees#christian-idicula</a>
Radosveta Ilieva, QC	3 years	October 27, 2017 – October 26, 2020	<a href="https://ingeniumcanada.org/corporation/board-of-trustees#radosveta-ilieva">https://ingeniumcanada.org/corporation/board-of-trustees#radosveta-ilieva</a>
Paul Johnston, ON	4 years	June 1, 2018 – May 31, 2022	<a href="https://ingeniumcanada.org/corporation/board-of-trustees#paul-d-johnston">https://ingeniumcanada.org/corporation/board-of-trustees#paul-d-johnston</a>
Heather Kennedy, AB	3 years	June 13, 2018 – June 12, 2021	<a href="https://ingeniumcanada.org/corporation/board-of-trustees#heather-kennedy">https://ingeniumcanada.org/corporation/board-of-trustees#heather-kennedy</a>
Andréanne Leduc, QC	4 years	October 27, 2017 – October 26, 2021	<a href="https://ingeniumcanada.org/corporation/board-of-trustees#andreeanne-leduc">https://ingeniumcanada.org/corporation/board-of-trustees#andreeanne-leduc</a>
Dr. Marianne Sadar, BC	4 years	October 27, 2017– October 26, 2021	<a href="https://ingeniumcanada.org/corporation/board-of-trustees#dr-marianne-sadar">https://ingeniumcanada.org/corporation/board-of-trustees#dr-marianne-sadar</a>
Kirstine Stewart, ON	3 years	April 13, 2021 – April 12, 2024	<a href="https://ingeniumcanada.org/corporation/board-of-trustees#kirstine-stewart">https://ingeniumcanada.org/corporation/board-of-trustees#kirstine-stewart</a>

## Board Committees

The Board is supported by five committees: the executive committee; the governance committee; the finance, audit and risk management committee; the sustainability and outreach committee; and the major facilities committee. Each committee is governed by its own terms of reference. Committees meet on a quarterly basis. Each committee is accountable to the full Board through regular reporting that communicates activities and decisions, ensures timely and effective risk signalling, and facilitates responsiveness between the committees. The President and CEO of the Corporation is a non-voting member of all five committees.

The **executive committee (EC)** exercises full authority under exceptional circumstances should the full Board of Trustees be unable to meet in a timely fashion and is convened for contract approvals that do not fall within the Board meeting cycle. The executive committee’s membership consists of the Board’s chair, the vice-chair and two additional trustees.

The **finance, audit and risk management committee (FARMC)** oversees the Corporation’s financial management controls, its practices and its information systems. In addition to providing oversight of the risk management policies and practices within the Corporation, the FARMC also selects internal audits

and reviews and advises the Board of Trustees on plans and reports from internal and external auditors. The committee is composed of no fewer than four trustees plus the Chair of the Board.

The **governance committee (GC)** monitors and reviews the governance of the Corporation regarding best practices for corporate governance and stewardship, and recommends appropriate changes to enhance corporate functioning and decision-making.

The GC reviews the Board's committee structure and oversees the Board's self-evaluation process.

The GC establishes and implements a formal training and in-depth orientation program for trustees. It supports the Board's succession planning by ensuring that the Board's skills matrix is regularly updated and identifying any gap in skills, experience or representation.

The GC establishes the annual performance objectives of the President and CEO, in accordance with the government's performance management program for chief executive officers of Crown corporations.

The GC provides governance oversight for the health and safety of Ingenium employees and the culture and values of the Corporation, including the review of relevant policy instruments and annual reports.

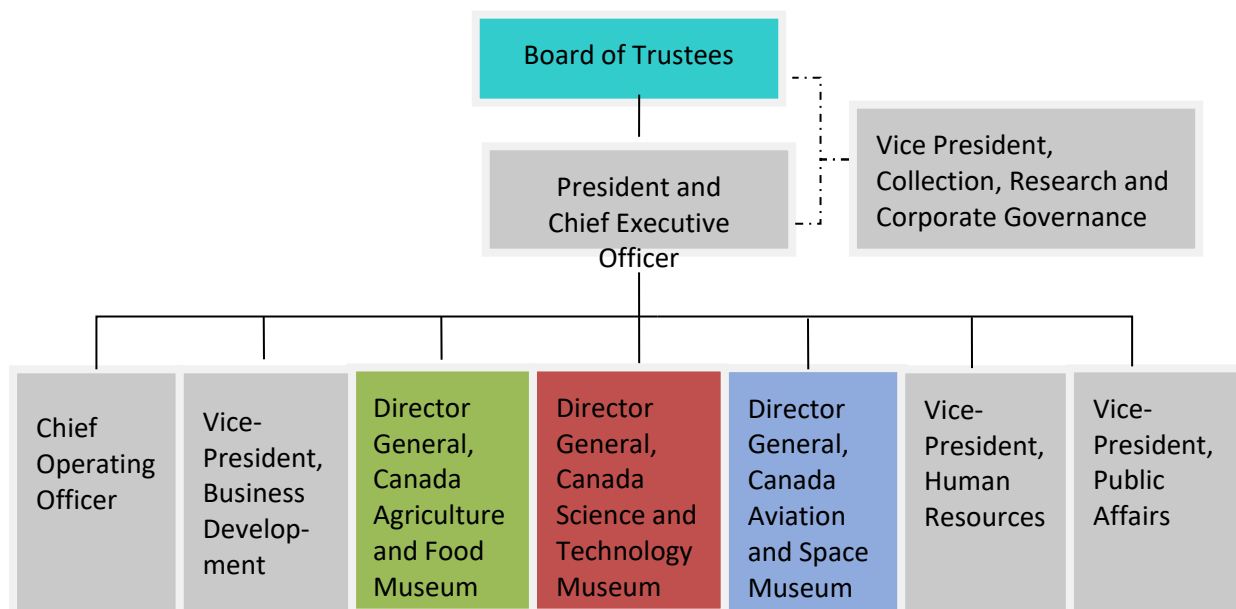
The committee is comprised of no fewer than four trustees plus the Chair of the Board.

The **sustainability and outreach committee (SOC)** provides strategic guidance to Ingenium regarding greater financial stability, revenue diversification, and stakeholder engagement. It monitors and evaluates progress in meeting sponsorship and fundraising targets and plans, and co-ordinates with and supports the Ingenium Foundation's philanthropic activities as appropriate. The OSC provides advice on approaches for strategic engagement and relationship-building, including identifying and engaging with key stakeholder and partners to assist Ingenium in implementing the strategic plan. The OSC is comprised of not fewer than four and not more than six trustees plus the Chair of the Board.

The **major facilities committee (MFC)** is an ad-hoc committee that provides enhanced oversight of the Corporation's major infrastructure projects, as well as the long-term infrastructure plans for the CSTM, CASM and CAFM. The MFC is composed of no fewer than four trustees plus the Chair of the Board.



## Executive Management



Compensation for Senior Executives is tied to performance results. Performance and at-risk pay for the CEO is determined by the performance agreement established, reviewed, and approved by the Executive Committee of the Board of Trustees. The current CEO – Christina Tessier – was appointed on June 11, 2018 for a 5-year term ending on June 10, 2023.

## 2.0 OPERATING ENVIRONMENT

---

### 2.1 Key Internal Environment Factors

Ingenium's greatest strength is its knowledgeable and experienced staff. For 2021-2022, the Corporation projects a total of 239.5 full-time equivalent employees (FTEs), including those associated with specific projects or initiatives, with the majority funded by special appropriations for the collection move, and others funded by sponsors and partner agreements. All permanent and term staff are covered by the public service pension and benefits plan. Most staff are unionized as part of the Public Service Alliance of Canada.

Similar to the service industry, a portion of the museums' front of house staff<sup>3</sup>, many of whom are youth, work on a part-time or casual basis. It also offers internships, co-ops, and research fellowships to college and university students. These opportunities also support recruitment and succession within Ingenium and across the heritage sector. A strong volunteer base also supports Ingenium's activities; however, on-site volunteering is on hold until the COVID-19 pandemic restrictions are lifted and site activity ramps up.

Ingenium has benefited from significant federal investments in infrastructure, including funds to rebuild the CSTM and renew its exhibitions; to address health and safety recapitalization required across its sites; and to build the Ingenium Centre, the first purpose-built facility for the conservation of the national science and technology collection. These capital investments are helping to resolve many long-standing issues with the state of Ingenium's facilities and collections care, as well as enabling the Corporation to showcase more artifacts in more relevant exhibits and programs.

The Corporation's reputation as a trusted source for content will continue to serve to expand its network of collaborators, domestically and internationally, with a focus on cost-sharing. Ingenium's working relationships with the creative sector, technology firms and academia to develop open platforms, 3D resources, games and augmented reality apps, have positioned it as a digital leader in the heritage sector and will be further leveraged through the Digital Innovation Lab.

### 2.2 Key External Environment Factors

**COVID-19 Pandemic:** The COVID-19 pandemic severely disrupted life globally in 2020, and will continue to have long-term impacts. Canada began implementing significant public health measures in March 2020 such as the closure of the physical sites for the majority of businesses and public institutions, including Ingenium's museums.

Ingenium has adapted to the cyclical site closures and reopenings throughout 2020 and into 2021. Ingenium's museums implemented a range of public health measures in order to ensure safe operations. These included significantly limiting visitor capacity on site, reducing operating hours, and increasing the frequency of sanitization. During periods of enhanced restrictions, all interactive experiences were closed to the public.

---

<sup>3</sup> Front of house work examples: admission and boutique cashiers, tour guides, and educational and public program delivery staff.

Uncertainty about the pandemic remains, including the speed of vaccine distribution versus the spread of the more contagious COVID-19 variants, which may necessitate further periods of closures. Ingenium will continue to adapt its practices and projections as the situation evolves.

**Technology:** With the rapid pace of technological change and growing experimentation with virtual, augmented, and mixed reality, museums have an increasing opportunity to create personalized and tailored experiences for on-site and virtual visitors such as tours customized to their interests. The COVID-19 pandemic necessitated a rapid shift to remote technology solutions and encouraged innovative program and service delivery. There may be opportunities to continue these innovations post-pandemic; however, virtual programs are more difficult to monetize, and as such, they represent less opportunity for cost recovery and revenue generation than on-site programming.

**Economy:** COVID-19 has significantly affected the Canadian economy, but projections suggest recovery: as of July 2020 economic activity had returned to 94 percent of February levels and as of August 2020, 1.9 million jobs had been recovered. The government's emergency benefits and wage subsidy programs supported the stability of households and businesses. However, uncertainty remains regarding the duration of the pandemic and the continuation of government support. As a result, consumer spending is not forecast to return to pre-pandemic levels through 2021.

**Tourism:** Tourism through 2020-2021 has been limited by border closures, travel advisories, and stay-at-home orders. Tourism is expected to resume gradually, however, the number of tourists in the region over the planning period is expected to be lower than pre-2020 due also to the closure of Parliament's Centre Block – a major tourist draw for Ottawa – until 2029.

**Competition:** There is increasing competition in the sponsorship and philanthropic markets, with an average net increase of 360 charities in Canada annually. COVID-19 has also shifted donor priorities towards the health and social services sectors to respond to immediate needs during the pandemic. Especially given the economic impacts and uncertainty for the private sector, the Corporation must remain an appealing opportunity for the philanthropic sector. Additionally, the four national museums in the NCR compete for similar audiences and donors.

**Audience expectations:** To remain relevant, the Corporation must evolve to meet the needs of changing demographics, cultural differences, and the growing expectation that public institutions like museums contribute to addressing social issues and responding to community needs. Through partnerships that amplify reach and impact, the Corporation can facilitate and increase national conversations about contemporary science, technology, and innovation topics. The Corporation also has the opportunity to apply the principles of social impact as lenses to make content and experiences more accessible and relevant for more diverse audiences. The Corporation can build from current offerings such as school programs adapted for the needs of groups from Autism Spectrum Disorder programs and adapted museum sites and experiences for visitors with disabilities.

## 2.3 Compliance, alignment, audits, and examinations

Ingenium strengthened its compliance monitoring and reporting program in 2019-2020 to better support its Board of Trustees' oversight of the Corporation's compliance with legislative and policy requirements. There have been no incidents of non-compliance.

Ingenium’s plans align with government direction and key priorities, particularly those related to its mandate and the subject matter of the museums: Diverse and Inclusive Canada; Canada in the World; Creative Canada; Environment and Climate Change; Indigenous Peoples; Jobs and Innovation; and Fair and Open Government.

The Office of the Auditor General of Canada (OAG) conducts an annual attestation audit, as well as a special examination at least once every 10 years, pursuant to the *Financial Administration Act*. The OAG conducted a special examination of the Corporation from November 2017 to April 2018, which became public on March 18, 2019 and is [available online](#). The OAG examined the Corporation’s systems and practices and made recommendations with respect to corporate governance; strategic and operational planning; risk management; collection management; and exhibition and program development. The Action Plan developed by Ingenium to address the recommendations was completed in fall 2021.

Ingenium also conducts internal audits. The internal audit on Cybersecurity at Ingenium was completed in February 2021. An action plan was developed based on the recommendations of the audit, and will be implemented in 2021-2022 and 2022-2023.

An internal audit of the accessibility of the built environment at the Canada Aviation and Space Museum was completed in March 2019, through the Rick Hansen Foundation Accessibility Certification (RHFAC) program.<sup>4</sup> Ingenium will complete the implementation of the audit action plan items in 2022. These include improvements to the employee entrance, increased lighting and directional signage, among others.

---

<sup>4</sup> An organization with an overall score of 60% or greater is rated “Accessibility Certified.” An organization must score 80% or greater to be rated “Accessibility Certified Gold”. Additional information about this evaluation process is available at <https://www.rickhansen.com/become-accessible/rating-certification>

## 3.0 GOALS, ACTIVITIES, RISKS, EXPECTED RESULTS, AND PERFORMANCE INDICATORS

Over 2021-2022, the Corporation will pursue the second year of its five-year Strategic Plan 2020-2025. The Corporation’s five-year strategic plan is a response to societal factors that are making museums – especially science and innovation museums – more critical than ever. Society has a declining belief in science and declining trust in many traditional institutions such as the media. Science museums like those of the Corporation remain a vital and trusted link between science, innovation and the public. This responsibility grew exponentially in importance in the face of the COVID-19 pandemic in which Canadians’ understanding of scientific findings, and their willingness to change their behaviour accordingly, is paramount to their health and, in some cases, their survival.

Three key factors continue to drive this work: collaborating with partners to expand reach and impact, democratizing and decolonizing museums by providing greater access and by co-creating, and remaining focused on the Corporation’s long-term sustainability and relevance. Three Strategic Goals aligned with those factors will guide resource allocation to achieve outcomes in the pursuit of Ingenium’s mandate:

1. Collaborate to innovate: Inspiring Canadian ingenuity
2. Access for all: Pushing the boundaries of engagement
3. Strengthen our foundations: Ensuring long-term financial sustainability

Ingenium has identified strategies and major activities, with key deliverables and implementation milestones, that demonstrate how it will make measurable progress on each Strategic Goal. In light of the COVID-19 pandemic, timelines have been extended or postponed for some major activities that were planned in 2020-2021, mainly those that were to occur on site or that were associated with the sites. The strategic goals and activities and financial plan presented herewith, were approved by the Board of Trustees in October 2020.

A new performance measurement framework was established during 2020-2021. Ingenium is continuing to set targets and identify baselines iteratively over the period because this work was disrupted by the pandemic. Some indicators may not have baselines or concrete targets until 2021-2022 or later.

**Note:** All Key Deliverables and Implementation Milestones marked with an asterisk (\*) are currently unfunded.

### 3.1 Strategic Goal 1: Collaborate to Innovate

Collaboration with academia, government, industry, and cultural institutions enables Ingenium to reach Canadians in more ways, with enhanced and expanded content. These collaborations are even more critical in 2021-2022 as the Corporation works with partners to provide a trusted source for essential science information and to ensure the sustainability of its work in these uncertain times. These mutually beneficial relationships support a common goal: to inspire and support Canadians to innovate.

<i>Strategies</i>	<i>Major Activities</i>	<i>Key Deliverables and Implementation Milestones</i>
Be a leader and partner of choice	Build and leverage sustainable partnerships that	Implementation of a partnership plan to select partners that advance shared STEAM goals (beginning in 2021)

<p>across the STEAM ecosystem</p>	<p>grow the STEAM skills pipeline</p>	<p>Expand Living Lab (applied user-centered research) model across the Corporation’s sites:</p> <ul style="list-style-type: none"> <li>• Expand CAFM academic partnerships beyond the National Capital Region (2020-2023)</li> <li>• Expand CASM Virtual Technology Lab (2021-2023)</li> <li>• Expand University of Ottawa Living Lab partnership at CSTM to include other research areas (2021-2023)</li> <li>• Establish the Digital Innovation Lab in the Ingenium Centre (2021-2022)</li> </ul> <p>Enable partners and educators to engage youth in STEAM:</p> <ul style="list-style-type: none"> <li>• Create a plan to scale up and share youth STEAM programs (2021-2022)</li> <li>• Enhance professional development opportunities for teachers and other educators by expanding the Summer Institute for Elementary Teachers and launching mini-courses at the museums (2022-2024)</li> <li>• Increase CASM programming with a focus on the science of flight, aerospace careers and space (2020-2025)</li> </ul> <p>Leverage the Aerospace Network to deliver programs that inspire interest in aerospace disciplines/careers (2020-2025):</p> <ul style="list-style-type: none"> <li>• Expand the national reach of aerospace-related educational resources developed with partners (2021-2025)</li> <li>• Host annual job fair and other career exploration opportunities (starting in 2021)</li> <li>• Launch Air Traffic Control exhibition that engages youth with aerospace careers (2021-2022)</li> </ul>
<p>Bridge science, technology, and society of key issues of our time</p>	<p>Leverage platforms, expertise and partnerships to engage Canadians on key issues of our time</p>	<p>Develop a Science Engagement framework (2021-2022) that guides:</p> <ul style="list-style-type: none"> <li>• The use of science capital principles to communicate and shape the Corporation’s learning content, interpretation, training, programming, and special events (start in 2022)</li> </ul> <p>Formalize key national and international research partnerships through joint projects, publications, conferences, fellowships and collaborating researchers (2021-2025)</p> <p>Collaborate on research related to communicating climate change (2020-2022) and understanding the social impact of energy and resources (2020-2022)</p> <p>Develop a 5-year plan for traveling exhibitions and outreach, that will support the development and reach of traveling exhibitions, nationally and internationally, on topics such as on Earth Observation* (2021-2022), Climate Change* (2021-2024), Aquaculture (2023-2025), Soil Superheroes (2021-2024)</p> <p>Develop and deliver programs that will highlight the UN Decade of Ocean Science (2021-2030)</p>

Empower a culture of Canadian innovation	Embed the dimensions of innovation culture within Ingenium’s offerings	<p>Identify opportunities to integrate (2021-2022), and undertake integration of (2022-2024), key innovation competencies (creativity, risk-taking, problem-solving, resilience) and inquiry-based learning in the Corporation’s programs</p> <p>Share Canadian innovators’ stories of success, failure, and perseverance:</p> <ul style="list-style-type: none"> <li>• Highlight Women in STEM initiative at the Frankfurt Book Fair (2021-2022)</li> <li>• Launch and expand opportunities for innovators and entrepreneurs to engage with visitors such as through onsite demonstrations, lecture series, and citizen science (2021-2023)</li> <li>• Conduct research that tell stories of Canadian innovation with emphasis on understanding the process of innovation, including electronic music (2020-2023), deindustrialization* (2021-2025), and Curating under Quarantine: innovation in the time of pandemic (2020-2025)</li> </ul>
--	--	--

Outcomes	Indicators	2019-20		2020-21		2021-22
		Target	Actual	Target	Results to Sept 30 2020	Target
Youth have expanded access to STEAM-related learning (short)	Individuals trained to deliver STEAM content	<i>New indicator introduced in 2020-2021</i>		<i>Baseline year</i>	295	117
	Youth participation in STEAM learning	<i>New indicator introduced in 2020-2021</i>		<i>Baseline year</i>	90	12,820
Growth of our partnerships and networks (short)	Growth of partnership and network agreements	<i>New indicator introduced in 2020-2021</i>		<i>Baseline year</i>	13	<i>TBD in 2021-2022*</i>
Strengthened capacity of the STEAM ecosystem (medium)	Capacity-building among partners	<i>New indicator introduced in 2020-2021</i>		<i>Baseline year</i>	<i>Survey not yet conducted</i>	<i>TBD in 2021-2022*</i>
Canadians have a trusted source of information on key issues of our time (short)	Audience trust	<i>New indicator introduced in 2020-2021</i>		90% benchmark	<i>Survey not yet conducted</i>	<i>TBD in 2021-2022*</i>
	Media coverage	<i>New indicator introduced in 2020-2021</i>		<i>Baseline year</i>	539 mentions and interviews	1,000 mentions and interviews
Our audiences feel confident engaging with key issues of our time (medium)	Audience confidence engaging with key issues	<i>New indicator introduced in 2020-2021</i>		<i>Baseline year</i>	<i>Survey not yet conducted</i>	<i>TBD in 2021-2022*</i>
Strengthened Canadian culture of innovation (ultimate)	Audience exhibiting innovation tendencies	<i>New indicator introduced in 2020-2021</i>		50% external benchmark	<i>Survey not yet conducted</i>	<i>TBD in 2021-2022*</i>
	Audience knowledge of Canadian innovation and innovators	<i>New indicator introduced in 2020-2021</i>		60% external benchmark	<i>Survey not yet conducted</i>	<i>TBD in 2021-2022*</i>

*\*Targets for indicators where the Corporation is already collecting data in 2020-2021 as a baseline year, will be established in the first quarter of 2021-2022 based on the year-end results. Targets for indicators that rely on survey tools for measurement will be established in 2021-2022 as the administration of surveys is delayed until 2021-2022 due to the pandemic context.*

## 3.2 Strategic Goal 2: Access for All

Ingenium is committed to pushing the boundaries of engagement with all Canadians. It will reduce physical, cognitive, sensory, and socioeconomic barriers to enable more visitors to enjoy its sites and experiences. The Corporation will work with diverse communities to respect and reflect Canada’s diversity in our offerings, including collaborations to represent First Nations, Inuit, and Métis cultures and ways of knowing.

The COVID-19 pandemic has necessitated a shift to digital delivery that is unprecedented in scope and speed. In response, the Corporation increased resources for its strategy of leveraging digital technologies to develop, adapt, and share its offerings and collection with Canadians from coast to coast to coast. It will continue this work to meet the needs of Ingenium’s audiences – especially educators, students, and parents – as they evolve through the pandemic and beyond.

<b>Strategies</b>	<b>Major Activities</b>	<b>Key Deliverables and Implementation Milestones</b>
Champion physical, cognitive, sensory, and socioeconomic accessibility	Make the Corporation’s experiences more accessible and share its accessibility best practices	<p>Launch and adapt programming for specific groups and communities:</p> <ul style="list-style-type: none"> <li>Expand free/subsidized programming to welcome visitors from different socioeconomic situations (2021-2023)</li> <li>Adapt programming to welcome audiences with sensory processing disorders and their families (2022-2025)</li> </ul> <p>Improve physical accessibility across the Corporation’s sites:</p> <ul style="list-style-type: none"> <li>Conduct CAFM Accessibility Audit (2023-2024)</li> <li>Implement recommendations from the CASM Accessibility Audit in partnership with impacted communities (2020-2025)</li> <li>Research and test accessible wayfinding standards (2021-2022) and implement (2022-2025)</li> <li>Complete the remedial lighting and sound work at CSTM (until 2022)</li> </ul> <p>Contribute as a Founding Member of the Canadian Accessibility Network (2020-2025)</p> <p>Collaborate on projects with Carleton University’s Access Living Lab (2020-2021)</p> <p>Publish Ingenium Channel articles highlighting the Corporation’s experiences with accessibility to inspire and support other institutions (2020-2025)</p>
Harness the power of digital to connect with Canadians	Develop creative and exploratory digital experiences to engage	<p>Launch the Digital Innovation Lab Strategy* (2020-2022):</p> <ul style="list-style-type: none"> <li>Undertake pilot projects that facilitate digital collection projects (e.g. 3D modeling, mixed reality, AI)*</li> </ul>



	<p>Canadians in meaningful ways</p>	<ul style="list-style-type: none"> <li>Identify key partnerships that will support the Corporation’s efforts to engage all Canadians</li> </ul> <p>Leverage digital opportunities to bring the Corporation’s educational content across Canada:</p> <ul style="list-style-type: none"> <li>Adapt and leverage existing resources to meet audiences’ needs for online resources during and after the COVID-19 pandemic (2020-2023)</li> </ul>
	<p>Enhance discoverability and information about the collection</p>	<p>Develop a prototype of a modern API (Application Programming Interface) for enhancing collection access, collaboration, and engagement digitally (2020-2022)*</p> <p>Identify key collections that are popular with audiences and well-suited to 2D and 3D scanning and sharing through open platforms (2020-2025)</p> <p>Establish a data governance framework to create accurate and trusted open data sets, data visualizations and other data products (2020-2023)</p>
<p>Respect and include diverse voices and communities</p>	<p>Engage with diverse communities to co-create stories, experiences, and collections</p>	<p>Develop a strategic roadmap that guides the Corporation’s community engagement efforts:</p> <ul style="list-style-type: none"> <li>Create welcoming experiences and programs with underrepresented groups including, recent immigrants, 2SLGBTQQIA individuals, and Official Languages minorities (2021-2023)</li> <li>Advance collaborative research with communities to uncover new layers of meaning in the collection that reflect diverse perspectives (2020-2025)</li> </ul>
	<p>Honour Indigenous ways of knowing in a spirit of reconciliation</p>	<p>Pursue an Indigenous astronomy research partnership, deliver the multi-event international Indigenous astronomy conference (2020-2021)*, and develop a travelling exhibition (2020-2023)</p> <p>Pursue a multi-year Indigenous collaborative foodways and natural resources research projects (funding-dependent, 2021-2024)</p> <p>Develop an Indigenous communities engagement strategy (2020-2022) and work with communities to:</p> <ul style="list-style-type: none"> <li>Co-host an Indigenous Science Fair (2022)</li> <li>Improve the Corporation’s youth and intergenerational knowledge-sharing programs (2021-2025)</li> <li>Increase the recognition of Indigenous peoples’ contributions in aviation (2020-2025)</li> <li>Address the Truth and Reconciliation recommendation (69 and 70) for improving the description of collection objects (start in 2020)</li> </ul>

Outcomes	Indicators	2019-20 (actual)		2020-21		2021-22
		Target	Actual	Target	Results to Sept 30 2020	Target
Enhanced accessibility of our museum sites and programs (short)	Visitor and partner perception of accessibility	New indicator introduced in 2020-2021		Baseline year	Survey not yet conducted	TBD in 2021-2022 <sup>+</sup>
Canadians have access to our offerings and collection through innovative digital means (short)	Virtual connections and engagements	Revised indicator introduced in 2020-2021		Baseline year	1.425 million	TBD in 2021-2022 <sup>+</sup>
	Digital availability of selected collections	New indicator introduced in 2020-2021		Archival materials: 24% (baseline was 23%) 3D artifacts: baseline	Archival materials digitized: 24.5% 3D artifacts: not yet determined	Archives target: 40% 3D artifacts: not yet determined
Members of diverse communities are engaged in shaping museum experiences and the collection (short)	Collaborations with diverse communities	New indicator introduced in 2020-2021		Baseline year	2 diverse communities collaborators	TBD in 2021-2022 <sup>+</sup>
Collaborations with Indigenous communities are activated throughout Canada (short)	Collaborations with Indigenous communities	New indicator introduced in 2020-2021		Baseline year	9 indigenous communities collaborators	TBD in 2021-2022 <sup>+</sup>
Canadians who traditionally faced barriers participated in onsite and online museum experiences (medium)	Visitorship representation	New indicator introduced in 2020-2021		Baseline year	Survey not yet conducted	TBD in 2021-2022 <sup>+</sup>
	Canadian regions engaged	New indicator introduced in 2020-2021		Baseline year	26%	TBD in 2021-2022 <sup>+</sup>
Diverse communities feel a sense of belonging in our experiences (ultimate)	Sense of belonging among audiences from diverse communities	New indicator introduced in 2020-2021		Baseline year	Survey not yet conducted	TBD in 2021-2022 <sup>+</sup>

### 3.3 Strategic Goal 3: Strengthen our Foundations

Ingenium’s success rests on core foundations: our team, our collection, our financial resources, our offerings, and our infrastructure. The COVID-19 pandemic has resulted in additional pressures for these foundations including significantly reduced revenues, new personal and professional circumstances for staff, and a rapid shift in operational processes. By strengthening these foundations, the Corporation is ensuring that the resources are in place to achieve successful program outcomes aligned to our Strategic Plan and that Ingenium can continue to adapt throughout the pandemic and the post-COVID-19 era.

Strategies	Major Activities	Key Deliverables and Implementation Milestones
Empower the Corporation’s team to live its shared corporate values	Strengthen the Corporation’s workplace culture	<p>Implement a staff engagement plan for the Strategic Plan 2020-2025:</p> <ul style="list-style-type: none"> <li>• Provide training and awareness on Corporate values, risk-taking, and innovation (starting in 2020)</li> </ul> <p>Support a staff-led Learning Network (2021-2023) to facilitate communities of practice, working groups and training on themes of equity, diversity, inclusivity, and accessibility; digital skills and corporate values</p> <p>Amend existing or create new tools and processes that support a diverse workforce (2021-2022)</p>
Unlock the full potential of the Ingenium Centre and national collection	Establish the Ingenium Centre as a centre of excellence for collections care, research and access	<p>Expand programs that leverage the collection to support the next generation of heritage professionals (e.g. Adjunct Curators, fellowships, collaborating scholars) (2020-2022)</p> <p>Complete the collection move into the Ingenium Centre (through 2022)</p> <p>Develop a plan addressing the collection cataloguing backlog and secure funding for implementation (2021-2023)</p> <p>Launch thematic collection tours in the Ingenium Centre (2021-2022)</p>
Secure the museums as destinations of choice	Attract new visitors and increase repeat visitation	<p>Create (2021-2022) an Audience Development plan to inform the development of offerings for new audiences</p> <p>Deliver the 3-year Exhibition Plan including, Air Traffic Control (2021-2022), Food Security* (2020-2024), Soil Superheroes (2021-2022), <i>One Sky, Many Worlds: Indigenous Voices in Astronomy</i> (2022-2023), Aquaculture (2022-2027), Indigenous Foodways* (2024-2025), Bicycle (2023), as well as hosting externally-produced exhibitions</p> <p>Improve the availability and quality of amenities at our sites to meet visitor needs and expectations (2020-2022)</p> <p>Target new groups for our on-site educational programming and camps including home schools, community centres, youth associations, school boards (2021-2023)</p>
	Pursue capital investments for optimal program delivery	<p>Establish a sustainable, long-term capital replacement plan (2021-2022) and pursue funding for its implementation (starting in 2021)</p> <p>Update the master site plans for CAFM (2020-2022) and develop funding strategies for:</p> <ul style="list-style-type: none"> <li>• Foodways Innovation Centre* (<i>working name</i>)(2021-2024)</li> <li>• Aerospace Campus* (including conservation labs) (2021-2025)</li> <li>• STEAM Park* (2024-2025)</li> </ul>
Increase and diversify revenue, sponsorship, and philanthropic giving	Increase the profitability of commercial operations	<p>Identify new sources of revenue and new markets for our offerings, such as:</p> <ul style="list-style-type: none"> <li>• Collection-based products for retail and wholesale (2021-2022)</li> </ul>

		<ul style="list-style-type: none"> <li>• Unique venue rentals experiences for the business meeting and retreat market (2021-2022)</li> <li>• Non-traditional venues for traveling exhibitions (2021-2022)</li> </ul> Develop a marketing strategy to align resources with the most profitable commercial operations (2021-2023)
	Grow multi-year funding relationships	Deliver a strategy with the Foundation to increase the donor base and philanthropic giving in support of the Strategic Plan (2021-2022), and implement the new strategy (2022-2025) Secure sustainable funding for the Research Institute (2020-2023) through grants and other contributions Align partnership development with 3-year exhibition and programming plans (rolling, ongoing)

Outcomes	Indicators	2019-20		2020-21		2021-22
		Target	Actual	Target	Result to Sept 30 2020	Target
Staff feel that our organization is a great place to work (Short)	Employee engagement	70%	68%	Bi-annual survey not conducted this year		70%
A collaborative, creative, inclusive, and accountable workforce (medium)	Staff exhibiting our shared values	New indicator introduced in 2020-2021		Baseline year	Survey not yet conducted	TBD in 2021-2022 <sup>+</sup>
	Workforce representation	None set	Women: 64.2% Persons with Disabilities: 1.7% Vis Min: 4.7% Indigenous: 2.7%	None set	Not yet reported	TBD in 2021-2022 <sup>+</sup>
	Staff feel supported to live our shared values	70%	68%	Bi-annual survey not conducted this year		70%
The national collection is better preserved, researched, and accessible (short)	Collection rehoused in the Ingenium Centre	15%	15%	41%	24%	70%
	Research sharing opportunities	New indicator introduced in 2020-2021		Baseline year	105	133
	Collection documentation	New indicator introduced in 2020-2021		Trade lit: 4% Archives: 6% Artifacts: baseline year	Trade Lit: 3% Archives: 5% 3D accession lots: 1%	Trade Lit: 5% Archives: 8% 3D Accession lots: 50%
Canadians experience a deeper engagement	Use of on-site collection-based resources	New indicator introduced in 2020-2021		Under review – on-site access limited		225

with the national collection (medium)						
Our museum experiences encourage local residents and tourists to visit and revisit (short)	Visitorship	893,000	804,000	92,800	45,053	108,000
	Membership	12,000	12,000	12,000	10,000	4,500
	General and tourism market share	25%	25%	25%	23%	General: 25% Tourism share: TBD in 2021-2022 <sup>+</sup>
	Admission value	<i>New indicator introduced in 2020-2021</i>		<i>Baseline year</i>	<i>Survey not yet conducted</i>	<i>TBD in 2021-2022<sup>+</sup></i>
	Asset condition	<i>New indicator introduced in 2020-2021</i>		<i>Baseline year</i>	<i>Survey not yet conducted</i>	<i>TBD in 2021-2022<sup>+</sup></i>
Our business model is aligned to the needs of the Strategic Plan (short)	Profitability of commercial operations	<i>New indicator introduced in 2020-2021</i>		<i>Baseline year</i>	<i>Not yet reported</i>	\$0
	Operating revenue	\$9.07M	\$9.79M	\$1.475M	\$0.873M	\$1.435M
	Contributions (cash)	\$1.6M	\$3.637M	\$0.85M	\$0.185M	\$0.54M
	Duration of financial partnerships	<i>New indicator introduced in 2020-2021</i>		<i>Baseline year</i>	<i>Not yet reported</i>	36 months
The collection and museums are sustainable and relevant for present and future generations (long)	Care of the collection	<i>New indicator introduced in 2020-2021</i>		<i>Baseline year</i>	<i>Not yet reported</i>	<i>TBD in 2021-2022<sup>+</sup></i>
	Exhibition renewal	<i>New indicator introduced in 2020-2021</i>		<i>Baseline year</i>	<i>Not yet reported</i>	<i>TBD in 2021-2022<sup>+</sup></i>

### 3.4 Corporate Risks

In 2017-18, Ingenium adopted a new integrated risk management framework that is consistent with applicable standards and follows the International Standards Organization (ISO) 31000 – Risk Management. Based on this framework, the Corporation captures risks to the organization in a risk register, evaluates the risks based on likelihood and impact, and establishes the treatment action plans for the risks that are beyond the Corporation’s tolerance threshold within a corporate risk profile.

For 2021-2022, four prominent risks included in the corporate risk profile are found to be above the Corporation’s tolerance threshold. These are summarized below:

- **Government funding:** The risk that Ingenium will not receive sufficient government funding due to escalating costs and the lack of indexation and new unfunded costs (payments in lieu of taxes for the Ingenium Centre).
  - **Mitigation:** Ingenium ensures diligent financial management to balance expenses with funding levels, and continues to inform government of cost pressures.

- **Sponsorships, contributions and philanthropy:** The risk that Ingenium will not be able to obtain required level of sponsorships and contributions (including philanthropic giving) from third-parties due to limited fundraising capacity.
  - **Mitigation:** Ingenium will develop and implement a sponsorship strategy that is aligned with the Strategic Goals and current environment. It will develop an inventory of sponsorships and partnerships to explore additional projects with existing partners. It will implement a customer relationship management strategy to deepen their engagement with Ingenium.
- **Competition/market conditions:** The risk that Ingenium will not adequately address changes in market fluctuations, remain competitive, and generate sufficient revenues, due to a limited marketing budget and a high level of competition for tourists within the National Capital Region, coupled with a decrease in tourism.
  - **Mitigation:** Ingenium will ensure that it will manage wage costs based on reduced visitor attendance caused by the pandemic. It will conduct a cost-benefit analysis on virtual program delivery during the easing of pandemic restrictions and post-pandemic.
- **Biosecurity:** The risk that a biohazard event / pandemic will occur on property of Ingenium, within the scope of service delivery, or in the region due to the current global health environment, that could endanger staff and animals and completely disrupt program delivery.
  - **Mitigation:** During the pandemic, all staff who can telework are doing so. Two task forces have been established that review procedures, implement measures, and consult with staff and visitors on their needs. Ingenium is ensuring the implementation of all public health measures, including provision of PPE, sanitization, site modifications and circulation signage.

In addition to these, Ingenium is closely monitoring risks pertaining to the workforce capacity to deliver on the aspirations of the strategic plan; potential damage during collection movement; the ability to maintain and operationalize its creative digital infrastructure; and ensuring cybersecurity.

## 4.0 FINANCIAL OVERVIEW

### 4.1 Financial Assumptions

#### Major assumptions with respect to funding and revenues

Ingenium assumes that it will receive a stable level of government funding over 2021-2022 to 2025-2026, at a base level of appropriations of \$28.5 million, for operating and capital.

Approximately 22 percent Ingenium's operating budget is typically funded is through self-generated revenues, and just under 5 percent is contributed income. The largest portion of operating revenues is generated by charging fees on museum activities and services, including admissions and educational programs, boutique sales, thematic experiences, parking, facility rentals and concessions. As such, operating revenues are highly correlated with the visitor attendance at the museums.

The following table provides a breakdown of attendance by museum.

**Table 1 – Visitor Attendance**

	2017-2018	2018-2019	2019-2020	2020-2021		2021-2022
	Actuals			Budget	Forecast	Projection
CSTM	278,000	509,000	367,000	365,000	37,000	46,000
CASM	279,000	227,000	209,000	233,000	29,300	28,000
CAFM	218,000	202,000	193,300	210,000	26,500	34,000
<b>Total</b>	<b>775,000</b>	<b>938,000</b>	<b>769,300</b>	<b>808,000</b>	<b>92,800</b>	<b>108,000</b>

Over 2018-2019, the first full fiscal year of operations of the renewed Canada Science and Technology Museum, while it also presented the critically-acclaimed *The Art of the Brick* special exhibition, the Corporation set an all-time record for attendance. The effects of reopening quickly wore off and the closure of the museums in March 2020 also contributed to lower attendance figures.

The projected attendance for 2021-2022 has been revised to under 20% of the visitation level that would have been expected. It reflects spring site closures during the most profitable months of the year, as well as the potential for further museums closures. It also considers broad considerations such as decreased tourism and travel restrictions, school field trip restrictions, reluctance to visit public spaces, fears of contagion, and reduced disposable income for participating in cultural activities. These factors are expected to slowly dissipate over the following few years.

Hence, revenue projections for admission, membership and program, boutique sales, concessions, venue rentals and parking, are also only 20% of could have been expected.

As the partnership and philanthropy pipeline experience the impacts of reduced activity, contribution levels are projected to bottom-out in 2021-2022 before beginning their recovery.

#### Major assumptions with respect to expenses

More than half of Ingenium's budget will be spent on salaries for museum staff to welcome visitors, operate the museums, develop and run programs and camps, delivery of services, and care for its collection and other assets. Personnel costs reflect the anticipated level of attendance. Due to the

COVID-relief funding and the Ingenium's expense reductions, there are no staff reductions projected for 2021-2022.

Retaining skilled and experienced staff will allow the Corporation to deliver on the majority of its planned activities, including some that were not completed in 2020-2021 due to the pandemic. Digital means are enabling the Corporation to reach new and broader audiences across the country and internationally. The 2021-2022 operational budget will allow Ingenium to:

- Deepen engagement with the public through social media platforms and website content, such as articles and blogs;
- Host webinars on a variety of themes related to social issues such as Women in STEM, impacts of the pandemic, etc.;
- Deliver virtual school programs and field trips until school boards resume field trips and on-site demand for these programs return;
- Deliver science communications and teacher training virtually;
- Develop and launch partner-funded temporary and travelling exhibitions;
- Provide additional educational resources for parents, educators and students through the development and delivery of virtual school programs, virtual museum tours, distance learning, and resources for doing science at home;
- Review and develop programs and exhibitions manage membership and partnership relations.

However, activities that are not feasible to deliver onsite safely or due to capacity restrictions, such as summer camps and birthday parties, are not expected to resume in 2021-2022. Facility rentals are not expected to resume until later in the year. Some program expenses will be reduced as a result.

The majority of the balance of Ingenium's budget will be absorbed by mandatory expenses associated with safely and securely operating the museums and collection buildings. The Corporation's asset portfolio includes 18 buildings across three museum campuses. Starting in 2019-2020, Ingenium began operating and occupying the new Ingenium Centre, while it gradually moves its significant national collection. Non-discretionary facilities will decrease in 2021-2022 from two of three collection storage facilities being vacated. The third leased facility containing about a third of the collection, to be vacated after the remaining racking is installed and the move is complete in 2022-2023.

Ingenium is carrying a loan repayment obligation for the \$4.2 million it received in 2008 to renovate the CASM. The Corporation is expected to repay it within 25 years, using the net operating income from the expected increase in revenues and fundraising for these new spaces. Revenue losses during the pandemic has delayed this repayment potential.

Over the planning period, Ingenium will complete the final interior fit-up and the exterior site works for the Ingenium Centre. It will also complete health and safety-related projects at its sites funded from deferred appropriations received over 2016 to 2021. Site closures and restrictions due to the pandemic delayed the completion of the small building renovations and replacement of the aviation runway perimeter fence at the CASM and the adjustments to the parking and vehicle circulation at CAFM.



## 4.2 Financial Statements

The *pro forma* financial statements have been prepared in accordance with Section 4200 series of the Canadian Public Sector Accounting Standards applicable to government-not-for-profit organizations. They are consistent with those reported in the institution's annual report. The Corporation applies the deferral method of accounting for contributions for not-for-profit organizations, hence, the statements are presented on the accrual basis of accounting. They display revenues by source and expenses by activity, consistent with the Corporation's core responsibilities reported in the *Main Estimates*.

**Table 2 – Statement of Financial Position**

<i>(in thousands of \$)</i>	2019- 2020 <i>Actual</i>	2020- 2021 <i>Forecast</i>	2021- 2022 <i>Budget</i>	2022- 2023 <i>Projection</i>	2023- 2024 <i>Projection</i>	2024- 2025 <i>Projection</i>	2025- 2026 <i>Projection</i>
<b>ASSETS</b>							
Current assets							
Cash and cash equivalents	\$19,688	\$17,460	\$10,892	\$7,793	\$5,793	\$4,593	\$4,693
Accounts receivable:							
- Government departments	\$963	\$900	\$900	\$900	\$900	\$900	\$900
- Trade	\$522	\$375	\$375	\$375	\$375	\$375	\$375
Inventories	\$631	\$600	\$600	\$600	\$600	\$600	\$600
Prepaid expenses	\$630	\$400	\$400	\$400	\$400	\$400	\$400
	\$22,434	\$19,735	\$13,167	\$10,068	\$8,068	\$6,868	\$6,968
Other assets							
Collection	\$1	\$1	\$1	\$1	\$1	\$1	\$1
Capital assets	\$264,606	\$255,156	\$255,456	\$246,355	\$234,255	\$222,155	\$210,055
	<b>\$287,041</b>	<b>\$274,892</b>	<b>\$268,624</b>	<b>\$256,424</b>	<b>\$242,324</b>	<b>\$229,024</b>	<b>\$217,024</b>
<b>LIABILITIES AND EQUITY</b>							
Current liabilities							
Accounts payable and accrued liabilities	\$7,644	\$7,500	\$7,500	\$9,000	\$10,500	\$12,000	\$13,500
Current portion of employee future benefits	\$343	\$268	\$200	\$200	\$200	\$200	\$200
Deferred revenue	\$10,579	\$9,079	\$2,479	\$2,479	\$2,479	\$2,479	\$2,479
	\$18,566	\$16,847	\$10,179	\$11,679	\$13,179	\$14,679	\$16,179
Other liabilities							
Employee future benefits	\$268	\$200	\$200	\$200	\$200	\$200	\$200
Long-term advance	\$4,208	\$4,208	\$4,208	\$4,208	\$4,208	\$4,208	\$4,208
Deferred capital funding	\$251,257	\$241,907	\$242,307	\$233,307	\$221,307	\$209,307	\$197,307
	\$274,299	\$263,162	\$256,894	\$249,394	\$238,894	\$228,394	\$217,894
Net assets							
Unrestricted	\$2,640	\$1,628	\$1,628	-\$3,072	-\$6,672	-\$9,472	-\$10,972
Investment in Capital	\$10,102	\$10,102	\$10,102	\$10,102	\$10,102	\$10,102	\$10,102
	\$12,742	\$11,730	\$11,730	\$7,030	\$3,430	\$630	-\$870
<b>TOTAL LIABILITIES AND NET ASSETS</b>	<b>\$287,041</b>	<b>\$274,892</b>	<b>\$268,624</b>	<b>\$256,424</b>	<b>\$242,324</b>	<b>\$229,024</b>	<b>\$217,024</b>

**Table 3 – Income Statement**

<i>(in thousands of \$)</i>	2019- 2020 <i>Actual</i>	2020- 2021 <i>Forecast</i>	2021- 2022 <i>Budget</i>	2022- 2023 <i>Projection</i>	2023- 2024 <i>Projection</i>	2024- 2025 <i>Projection</i>	2025- 2026 <i>Projection</i>
<b>REVENUE</b>							
Admission and programs							
Science and Technology	\$2,663	\$255	\$300	\$800	\$1,200	\$1,600	\$2,000
Aviation and Space	\$910	\$105	\$145	\$360	\$570	\$750	\$960
Agriculture and Food	\$927	\$75	\$140	\$350	\$540	\$720	\$940
Boutique Sales	\$1,166	\$120	\$175	\$480	\$720	\$840	\$1,220
Facility Rentals and concessions	\$617	\$35	\$0	\$200	\$360	\$480	\$600
Parking	\$1,126	\$100	\$125	\$320	\$480	\$640	\$820
Membership	\$1,094	\$335	\$150	\$380	\$600	\$800	\$1,000
Farm Operations	\$390	\$340	\$330	\$330	\$330	\$330	\$330
Travelling exhibitions	\$220	\$40	\$30	\$80	\$120	\$160	\$200
Other	\$678	\$70	\$40	\$100	\$150	\$200	\$260
<b>Total operating revenue</b>	<b>\$9,791</b>	<b>\$1,475</b>	<b>\$1,435</b>	<b>\$3,400</b>	<b>\$5,070</b>	<b>\$6,520</b>	<b>\$8,330</b>
Contributions	\$3,637	\$850	\$540	\$1,800	\$1,800	\$1,800	\$2,000
Interest	\$786	\$100	\$50	\$100	\$50	\$50	\$50
<b>TOTAL REVENUE</b>	<b>\$14,214</b>	<b>\$2,425</b>	<b>\$2,025</b>	<b>\$5,300</b>	<b>\$6,920</b>	<b>\$8,370</b>	<b>\$10,380</b>
<b>EXPENSES</b>							
Heritage preservation and research	\$6,536	\$6,600	\$6,343	\$5,150	\$5,200	\$5,250	\$5,350
Exhibitions, programs and outreach	\$20,041	\$16,132	\$16,299	\$16,514	\$16,784	\$17,134	\$17,544
Museum and collection buildings	\$20,357	\$22,540	\$21,000	\$20,900	\$20,950	\$21,000	\$21,050
Internal services	\$8,256	\$7,504	\$7,700	\$7,950	\$8,100	\$8,300	\$8,450
<b>TOTAL EXPENSES</b>	<b>\$55,190</b>	<b>\$52,776</b>	<b>\$51,342</b>	<b>\$50,514</b>	<b>\$51,034</b>	<b>\$51,684</b>	<b>\$52,394</b>
Net Results of operations before government funding	-\$40,976	-\$50,351	-\$49,317	-\$45,214	-\$44,114	-\$43,314	-\$42,014
Parliamentary Appropriations	\$40,275	\$49,339	\$49,317	\$40,514	\$40,514	\$40,514	\$40,514
<b>NET EARNINGS (LOSS)</b>	<b>-\$701</b>	<b>-\$1,012</b>	<b>\$0</b>	<b>-\$4,700</b>	<b>-\$3,600</b>	<b>-\$2,800</b>	<b>-\$1,500</b>

**Table 4 – Statement of Cash Flows**

<i>(in thousands of \$)</i>	2019- 2020 <i>Actual</i>	2020- 2021 <i>Forecast</i>	2021- 2022 <i>Budget</i>	2022- 2023 <i>Projection</i>	2023- 2024 <i>Projection</i>	2024- 2025 <i>Projection</i>	2025- 2026 <i>Projection</i>
<b>OPERATING ACTIVITIES</b>							
Cash received (clients)	\$12,773	\$1,686	\$1,435	\$3,401	\$5,070	\$6,520	\$8,330
Parliamentary Appropriations received for operations	\$27,347	\$36,939	\$36,919	\$27,716	\$27,714	\$27,714	\$27,714
Cash paid to suppliers	-\$20,587	-\$40,302	-\$38,910	-\$36,113	-\$36,634	-\$37,284	-\$37,994
Payments related to salary and benefits	-\$23,328	-\$19,550	-\$19,550	-\$19,549	-\$19,548	-\$19,548	-\$19,548
Cash Received from the Foundation	\$77	\$850	\$540	\$1,800	\$1,800	\$1,800	\$2,000
Interest received	\$854	\$100	\$50	\$100	\$50	\$50	\$50
<b>Net cash flows generated from/used for Operating activities</b>	<b>-\$2,864</b>	<b>-\$727</b>	<b>\$34</b>	<b>-\$3,096</b>	<b>-\$2,000</b>	<b>-\$1,200</b>	<b>\$100</b>
<b>CAPITAL ACTIVITIES</b>							
Payments related to capital acquisitions	-\$30,830	-\$3,050	-\$12,800	-\$3,800	-\$800	-\$800	-\$800
<b>Net Cash used through Capital Activities</b>	<b>-\$30,830</b>	<b>-\$3,050</b>	<b>-\$12,800</b>	<b>-\$3,800</b>	<b>-\$800</b>	<b>-\$800</b>	<b>-\$800</b>
<b>FINANCING ACTIVITIES</b>							
Funding for acquisition of capital assets	\$4,186	\$1,549	\$6,198	\$3,797	\$800	\$800	\$800
<b>Net cash flows from Financing activities</b>	<b>\$4,186</b>	<b>\$1,549</b>	<b>\$6,198</b>	<b>\$3,797</b>	<b>\$800</b>	<b>\$800</b>	<b>\$800</b>
Increase (Decrease) in Cash and short-term investments	-\$29,508	-\$2,228	-\$6,568	-\$3,099	-\$2,000	-\$1,200	\$100
Cash and cash equivalents, beginning of year	\$49,196	\$19,688	\$17,460	\$10,892	\$7,793	\$5,793	\$4,593
<b>CASH AND CASH EQUIVALENTS, END OF YEAR</b>	<b>\$19,688</b>	<b>\$17,460</b>	<b>\$10,892</b>	<b>\$7,793</b>	<b>\$5,793</b>	<b>\$4,593</b>	<b>\$4,693</b>

**Table 5 – Changes in Net Assets**

<i>(in thousands of \$)</i>	2019- 2020 <i>Actual</i>	2020- 2021 <i>Forecast</i>	2021- 2022 <i>Budget</i>	2022-2023 <i>Projection</i>	2023- 2024 <i>Projection</i>	2024- 2025 <i>Projection</i>	2025- 2026 <i>Projection</i>
Investment in capital assets, beginning of period	\$10,102	\$10,102	\$10,102	\$10,102	\$10,102	\$10,102	\$10,102
Changes in investment in capital assets	-	-	-	-	-	-	-
<b>Investment in capital assets, end of period</b>	<b>\$10,102</b>	<b>\$10,102</b>	<b>\$10,102</b>	<b>\$10,102</b>	<b>\$10,102</b>	<b>\$10,102</b>	<b>\$10,102</b>
Unrestricted net assets, beginning of period	\$3,341	\$2,640	\$1,628	\$1,628	-\$3,072	-\$6,672	-\$9,472
Surplus (loss) for the period	-\$701	-\$1,012	\$0	-\$4,700	-\$3,600	-\$2,800	-\$1,500
<b>Unrestricted net assets, end of period</b>	<b>\$2,640</b>	<b>\$1,628</b>	<b>\$1,628</b>	<b>-\$3,072</b>	<b>-\$6,672</b>	<b>-\$9,472</b>	<b>-\$10,972</b>
<b>NET ASSETS END OF PERIOD</b>	<b>\$12,742</b>	<b>\$11,730</b>	<b>\$11,730</b>	<b>\$7,030</b>	<b>\$3,430</b>	<b>\$630</b>	<b>-\$870</b>

## 4.2.1 Notes supporting the financial assumptions

**Parliamentary Appropriations:** The Corporation assumes it will continue to receive the revised level base level of appropriations over the five-year period, \$28.5 million annually (cash basis), taking into account the retroactive wage adjustment for salary economic increases for 2018-2019 to 2020-2021, but excluding the assumption of future economic salary funding increase. It also does not assume that the Corporation will continue to receive temporary COVID-19 pandemic relief funding over the period, as it did in 2020-2021 and 2021-2022, or the PILT funding it received in 2021-2022. These projections are based on forecasted revenue losses estimated using current information available and recent experience with pandemic impacts on attendance in 2020-2021.

The majority of deferred appropriations spent in 2018-2019 and 2019-2020 were the capital funds received in 2016-2017 and 2017-2018 for the construction of the new Ingenium Centre and funds received over the last five years to complete health and safety-related capital projects that were deferred to 2021-2022. The operating funds associated with the collection move into the Ingenium Centre and vacating the current leases are being spent through 2021-2022.

### Detailed Revenue Assumptions

The largest portion of operating revenues is generated by charging fees on museum activities and services, including admissions and programs, memberships, boutique sales, thematic experiences, parking, facility rentals and concessions, and are highly correlated with museum attendance projections.

**Admission revenue:** The admission gate revenue projection for 2021-2022 assumes that the current public health measures which significantly impact attendance, such as travel restrictions and caps on group sizes in public spaces, will be maintained for the year while the vaccination of the public occurs. As such, projected admission revenues only represent 13 percent of the amount attained in 2019-2020. The projections for the following years are based on the incremental visitation recovery anticipated through 2025-2026, at which point a new “normal” baseline will be achieved for future visitation.

**Programming revenue:** Visitors also come to the museums for programming activities, including educational programs for school groups, seasonal camps, guided tours, and birthday parties. The majority of revenues in this category are generated from school programs. The Corporation assumes that school field trip restrictions will be maintained during 2021-2022, and so revenues from this category will only come from virtual educational programs offered to schools, which are priced much lower but are still delivered by onsite visitor experience staff. The Corporation assumes a gradual re-introduction of on-site delivery of seasonal camps, tours and birthday parties as of 2022-2023, and that it will take time to rebuild the audience for them.

**Membership revenue:** The Corporation offers a tiered membership program, with categories for families, seniors, students, and others. Membership privileges include: unlimited admission to the CSTM, CASM and CAFM; a discount on renewal; discounts in the museums’ gift shops and cafeterias; early registration to summer camps; and exclusive members-only events and tours. However, many of these benefits have been reduced due to the current public health measures. With attendance and membership sales significantly down in 2020-2021, this will affect renewal rates in 2021-2022 as well. Membership sales and renewals are expected to begin their recovery in 2022-2023.

**Retail revenue:** The CASM and CSTM have on-site boutiques, complemented by a corporate online retail site that sells books, toys, games, giftware, apparel, and branded merchandise related to the content of each museum. The Corporation had been experiencing a growth trend in the average retail revenue per visitor since reopening the CSTM in 2017, from \$1.85 per visitor to \$2 per visitor in 2019-2020. In 2020-2021, on-site boutique sales dropped by 90 percent due to site closures and limited visitation, while a minor growth occurred in online boutique revenues. The Corporation expects more of the same in 2021-2022.

**Parking revenue:** Parking at the museum sites is available at a maximum charge of \$8 per day. The Corporation receives all parking revenue, and pays a management fee to a third party which monitors the lots, collects parking fees, and maintains the meters. The Corporation's agreement with the Montfort Hospital for parking at CASM that had been in place for many years may not be maintained due to employees working from home. Over the planning period, the parking revenues are expected to incrementally recover until they level off at \$820,000 annually in 2025-2026, aligned with the new base attendance level.

**Facility rentals revenue:** The calculation of facility rentals revenue uses a fee-per-event model plus a profit-sharing model with an on-site food services provider at CASM and CSTM. Preferred caterers also pay an annual fee. The awareness of rental spaces at the museums had grown in recent years, until all events had to be cancelled in 2020-2021. The facilities rentals revenue projection for 2021-2022 assumes there will be no bookings in the year, and very little concession revenue. Over the planning period, the Corporation assumes a modest increase in rentals and in the profit margin per rental.

**Travelling Exhibitions revenue:** The Corporation collects fees from the rental of travelling exhibitions by other venues domestically and internationally. Travelling exhibitions are developed with financial assistance from contributions and sponsors. The Corporation has grown its travelling exhibition program with exhibitions of various sizes, both 2D and 3D types, which are marketed to both heritage institutions and non-traditional venues like libraries and embassies.

Many bookings that had been planned for 2020-2021 have been deferred to 2021-2022, while the rate of new bookings is lower than in recent years. The revenues in this category are only expected to begin recovery once public venues are opened to their full capacity.

**Farm operations revenue:** The CAFM includes a demonstration working farm which generates revenues from milk production. This is the only revenue category that will not experience a sharp decline and incremental recovery due to the COVID. Farm operations revenues are projected at a consistent level over the planning period.

**Other (miscellaneous) revenue:** The revenues in this category depend heavily on the visitor participation in thematic experiences and the number of special events at the museums. Licensing and copyright fees are also recognized as revenues in this category. The proceeds of the sales of surplus assets rationalized as part of the collection, general warehouse and office move were the main contributor to a significant increase in revenues 2019-2020.

**Sponsorships and contributions:** The Corporation generates contributions through partner agreements, and in-kind and financial contributions from the Ingenium Foundation, a registered charity and separate legal entity, which is dedicated to providing access to the Corporation's exhibitions and educational programs, as well as funds to care for the national science and technology collection. In-kind

contributions include support from employees of other government organizations for which the fair market value can be determined. Ingenium’s fundraising capacity faces an increasingly competitive sponsorship and philanthropic sector.

**Interest revenue:** The short-term cash balance is invested in low-risk vehicles (i.e. GICs) with an expected yield of 1.5 percent. The cash balance that was carried in recent years was mainly associated with the capital funds in reserve to complete the Ingenium Centre and health and safety-related infrastructure recapitalization projects. As the Corporation uses funds to complete infrastructure projects, interest revenue will be much lower over the planning period.

## Description of the Core Responsibilities

**Heritage Preservation and Research** includes all of the activities dedicated to developing and caring for the collection, such as cataloguing and conserving artifacts and archives, conducting historical research, and providing library and information management services. It also includes the costs for preparing the collection and moving it to the new Ingenium Centre. Curatorial, conservation and collection staff salaries are included here.

**Exhibitions, Programs and Outreach** includes all the activities dedicated to the interpretation of the collection and the demonstration of scientific and technological processes through exhibitions, national initiatives, educational resources, and outreach offerings. Salaries of the museums’ staff are included in this category.

**Museum and Collection Buildings** refers to all of the activities to operate and care for the accommodations and physical environments that are required to house, protect and display the collection; the technical conservation and collection laboratories; the public museum facilities; and the administration space for staff. This includes the salaries for facilities management staff.

**Internal services** support all of the Corporation’s activities, including those that pertain to governance and management of resources and activities, as well as compliance and reporting. It involves the efforts to increase revenue generation through sponsorships and commercial activities, and the administrative support provided to the Ingenium Foundation.

## 4.3 Operating Budget

The projected expenses over the planning period will be used to maintain base program integrity, essential operations and assets, and meet financial and contractual obligations.

The Corporation will operate in a balanced position in 2021-2022 thanks to COVID-19 pandemic impacts relief funding of \$7.6 million provided through federal budget 2021. This temporary supplementary funding will counteract the significant revenue losses and additional costs associated with the COVID-19 pandemic impacts and will cover the PILT costs for the Ingenium Centre, which currently exceed its PILT funding.

The Corporation does not expect to be able to continue to operate in a balanced position over the remaining period given the significant revenue losses expected until museum attendance and revenues recover from the pandemic impacts, and due to the unfunded PILT costs for the Ingenium Centre.

The tables below show the Corporation’s operating budget by key activity on an accrual basis.

**Table 6 – Operating Budget by Major Activity**

<i>(in thousands of \$)</i>	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025	2025-2026
	<i>Actuals</i>	<i>Forecast</i>	<i>Budget</i>		<i>Projections</i>		
Personnel costs	23,308	21,900	22,500	22,500	22,625	22,775	22,900
Facilities non-discretionary costs	12,251	12,565	10,570	9,965	10,065	10,190	10,290
Mold remediation	-	-	-	-	-	-	-
Collection moving	1,586	1,112	800	-	-	-	-
Amortization	9,621	12,500	12,500	12,900	12,900	12,900	12,900
Collection development and management	586	672	665	647	647	647	647
Programming and exhibitions	4,870	2,150	2,252	2,337	2,437	2,687	2,947
Internal services support	1,620	1,460	1,450	1,475	1,500	1,515	1,530
Advertising	812	450	455	450	500	550	600
Gift shop products	536	67	150	240	360	420	580
<b>Total accrual basis</b>	<b>55,190</b>	<b>52,876</b>	<b>51,342</b>	<b>50,114</b>	<b>50,634</b>	<b>51,284</b>	<b>51,994</b>

The majority of the Corporation’s operating budget is spent on salary expenses; however, a portion of these salaries are funded through revenue-generating activities at the museums (admissions, boutiques, programs, events, etc.), or through contributions for special projects. The cancellation of various on-site programs through 2020-2021 and 2021-2022 reduced Ingenium’s need for term positions.

The forecast of expenses for 2021-2022 reflected reduced costs for developing and delivering programs and exhibitions, internal services, advertising, and acquiring gift shop products to sell. In comparison, personnel costs and non-discretionary facilities expenses and amortization expenses are increasing due to the Ingenium Centre completion and the extension of the collection move project. Collection development and management expenses will be slightly higher due to the acquisition of materials and supplies to care for the collection.

Reduced travel costs are projected in 2021-2022, as the Corporation anticipates that a maximum of one in-person Board meeting could occur. The decrease in Business Development and Commercial Operations forecast for 2021-2022 reflects the reduction in staff and goods acquired to sell at boutiques as a result of the attendance decline.

To operate its 18 facilities, the Corporation incurs substantial fixed, non-discretionary expenses including rent, PILT, protection services, property maintenance and utilities. These costs are affected by inflation and determined by market prices and contract negotiations.

Expenses peaked in 2019-2020 when the Corporation began operating the new Ingenium Centre while carrying leases that house the collection, which is being moved into the Centre. The collection move funded by special appropriations received in 2016, ramped up in 2019-2020, and will continue through 2022-2023 due to delays caused by the pandemic, such as stay-at-home orders. Temporary staff supporting the artifact preparations for the move have been onboard since 2018-2019, and reinforced in 2021-2022, will be phased-out as the collection move draws to a close in 2022-2023.

As of 2021-2022, facilities costs will decline as the Corporation will have vacated a second leased facility using the remaining collection move special funding. Facilities expenses will continue to increase with

inflation. The remaining expenses are expected to be kept at a minimum during 2021-2022, and then increase incrementally each year to keep pace with inflation and the expected attendance recovery.

#### 4.4 Capital Budget

The capital budget for 2021–2022 will provide \$12 million to complete infrastructure projects and other major repairs and replacements. The base capital budget of \$800,000 will be used to make essential lifecycle repairs and replacements to critical corporate assets, including its building systems, information technology (IT) systems, laboratory and material handling equipment, and furniture and fixtures. With audience expectations for digital and interactive cultural content forms fuelled by rapidly advancing digital technology, appropriate physical and technology equipment is a necessity that requires constant upgrades.

The Corporation’s capital budget is presented in the context of a five-year capital outlook below.

**Table 7 – Capital Budget**

<i>(in thousands of \$)</i>	2019- 2020 <i>Actual</i>	2020- 2021		2021- 2022 <i>Budget</i>	2022- 2023	2023- 2024	2024- 2025	2025- 2026
		<i>Budget</i>	<i>Forecast</i>		<i>Projections</i>			
<b><i>Heritage preservation &amp; research</i></b>								
Technical equipment	50	75	150	50	50	50	50	50
<b><i>Exhibitions, programs &amp; outreach</i></b>								
Farm equipment	25	50	0	50	50	50	50	50
Permanent exhibitions	0	0	0	0	0	0	0	0
<b><i>Museum and collection buildings</i></b>								
Ingenium Centre	17,861	0	1,450	7,692	3,000	-	-	-
Health & Safety projects	1,143	6,250	1,250	4,308	-	-	-	-
CSTM Lifecycle repairs	212	150	0	150	150	150	150	150
CASM Lifecycle repairs	125	125	100	125	125	125	125	125
CAFM Lifecycle repairs	75	75	0	75	75	75	75	75
Security equipment	0	50	0	50	50	50	50	50
Tenant improvements	0	0	0	0	0	0	0	0
<b><i>Internal services</i></b>								
Fleet and other equipment	125	100	0	100	100	100	100	100
IT infrastructure	250	200	150	200	200	200	200	200
<b>Total (cash basis)</b>	<b>19,804</b>	<b>7,050</b>	<b>3,050</b>	<b>12,800</b>	<b>3,800</b>	<b>800</b>	<b>800</b>	<b>800</b>

#### Health and Safety Projects

Ingenium will spend the balance of funding received through federal budget 2016 to make repairs and recapitalize its facilities and major equipment in order to address health and safety concerns and resolve deferred recapitalization. Of the nine projects funded, only two will remain to be completed in 2021-2022 to 2022-2023. To date, all the projects have been completed within plus/minus 5 to 10 percent of their estimate, allowing the Corporation to remain within the overall allocation for these projects.



- the repairs and replacement of the airport runway perimeter fence at CASM will occur in spring 2021, as the work requires favourable weather conditions; and
- the planning for new parking and civil work for visitors at the Canada Agriculture and Food Museum site was slowed. A new master site plan was prepared, requiring consultation with the Department of Agriculture and Agri-food Canada, the site owner, and approval for land use by the National Capital Commission (NCC). The project will break ground later in 2021.

## The Ingenium Centre

As part of the federal infrastructure initiative announced in federal budget 2016, the Corporation received capital funding totalling \$150.2 million, to construct a new purpose-built collections conservation centre to preserve and protect priceless Canadian heritage artifacts. This building provides specialized temperature and humidity controlled, sealed and secure artifact storage, as well as laboratories and workshops, library and archives and corporate offices. The Corporation is the Centre's primary occupant, which includes space for art storage for the National Gallery of Canada. Co-tenancy builds on natural synergies that lead to efficiencies.

Due to site, design and construction issues arising from unforeseen sub-terrain conditions, labour strikes, material shortages, manufacturing delays, tariffs, design requirements imposed through the land use approval, among other factors, the cost to construct the Ingenium Centre grew beyond estimations and funding level. Hence, some elements were deferred in order to ensure the base construction and fit-up of the Centre. Through budget 2021, the federal government provided an additional \$10 million to complete the building equipment fit-up and site circulation. In total, the Ingenium Centre once completed will have cost approximately \$160 million.

Thanks to the project funding top-up received through budget 2021, the project will be able to meet its main objectives: providing safer access to the collections; providing appropriate temperature and humidity-controlled and secure environments and new labs for collection preservation; consolidating staff with collections and labs for increased productivity and efficiency; and establishing a new research institute that will focus on the collection and Canada's material culture.

The construction of the Ingenium Centre was completed in 2019-2020. Over 2021-2022, the complete the racking system and service elevator will be installed. The exterior vehicular, pedestrian pathways and parking improvements will be well underway to be completed in 2022-2023, along with the digital lab and vitrine installations.

Ingenium will hold a formal public launch after the pandemic-related restrictions on public gatherings are lifted and the move is complete.