



Summary of
2014-2015 to 2018-2019
CORPORATE PLAN

Summary of
2014-2015
OPERATING BUDGET

Summary of
2014-2015
CAPITAL BUDGET



CANADA SCIENCE AND TECHNOLOGY
MUSEUMS CORPORATION

AGRICULTURE - FOOD
AVIATION - SPACE
SCIENCE - TECHNOLOGY



Canada

TABLE OF CONTENTS

EXECUTIVE SUMMARY	3
1.0 MANDATE.....	6
1.1 SUPPORTING GOVERNMENT PRIORITIES	7
2.0 CORPORATE PROFILE	8
2.1 MUSEUMS AND THE COLLECTION.....	8
2.2 GOVERNANCE STRUCTURE	9
2.3 THE CSTMC FOUNDATION	11
2.4 RESOURCES AND EXPENSES	12
3.0 STRATEGIC ISSUES.....	14
3.1 ENVIRONMENTAL SCAN.....	14
3.2 RISKS AND MITIGATION STRATEGIES	15
3.3 HIGHLIGHTS AND CHALLENGES FROM 2013–2014	17
4.0 KEY RESULT AREAS AND STRATEGIC OBJECTIVES	19
4.1 PLANNING PROCESS	19
4.2 PROGRAM ALIGNMENT ARCHITECTURE AND KEY RESULT AREAS.....	19
4.3 STRATEGIES AND ACTIVITIES	20
5.0 FINANCIAL DISCUSSION	34
5.1 OPERATING BUDGET	34
5.2 FINANCIAL PLANNING ASSUMPTIONS AND PROJECTIONS FOR 2014–2015.....	35
5.3 CAPITAL BUDGET	41
ANNEX 1 – NMST BOARD OF TRUSTEES	46
ANNEX 2 – EXHIBITIONS PLANNED FOR 2014–2015	47

EXECUTIVE SUMMARY

The National Museum of Science and Technology (NMST)¹ is mandated to preserve Canada's scientific and technological heritage and to promote, celebrate, and share knowledge of that heritage with Canadians. A federal Crown Corporation, the NMST proudly operates the Canada Science and Technology Museum (CSTM) and two affiliated national museums: the Canada Aviation and Space Museum (CASM) and the Canada Agriculture and Food Museum (CAFM).

In September 2014, the Canada Science and Technology Museum was closed indefinitely for health and safety concerns due to the discovery of toxic mold and a failing roof.

The Corporation reached in excess of 10 million people in 2012–2013 through on-site and virtual visits. This included over 650,000 visitors to the museums, 6.5 million visitors experiencing NMST programs and/or artefacts on loan to other institutions, and 3.3 million visits to its four websites. Both CASM and CAFM are on track to meet their 2014–2015 attendance targets. Due to its closure, attendance at the CSTM for 2014–2015 reached only 165,000 visitors, just over half its original target of 300,000.

Funding and Revenues

In 2014–2015, the NMST will receive a base appropriation of \$26.862 million for operations and capital for the three museums. At the start of 2014–2015, the Corporation expected to generate \$6.835 million in revenues, for a total 2014–2015 budget of \$33.697 million. Due to the CSTM closure, the Corporation is now expected to generate only \$5.835 million in revenues, representing a reduction of \$1 million. Although the NMST has reduced expenses to help offset this loss, a deficit will be posted for 2014–2015, which the Corporation will absorb internally.

Although the 2013–2014 fiscal year saw a significant spike in admissions and commercial and other revenues due to the blockbuster *Star Wars™ Identities* exhibition at the Canada Aviation and Space Museum, the Corporation posted a deficit for 2013–2014, which was covered by the accumulated unrestricted net assets as of the end of 2012–2013, to fund roof repairs at the Canada Science and Technology Museum building.

¹ The NMST common name is the Canada Science and Technology Museums Corporation (CSTMC). This is the name used in communications except when the legal name is required.

Key Risks

The Corporation's viability is dependent on its capacity to generate revenues equal to at least 19% of its total budget. This is a significant challenge in current economic times, which has been amplified by the closure of the CSTM. The Corporation is dedicated to increasing revenues through a variety of activities, including expanding the products available at the boutiques, revamping the online boutique and creating a more robust facility rental program for CASM and the new rental facilities in the CAFM Learning Centre.

Other risks the Corporation is facing in 2014–2015 include:

- jeopardizing the national collection through inappropriate storage conditions; and
- loss of relevance due to limited capacity to invest in programming and exhibitions.

Key Result Areas

The NMST continues to focus on achieving the following long-term objectives:

- *Engagement and Presence*: connecting Canadians to science and technology's past, present, and future using compelling experiences to promote science literacy and interest in technology, engineering and mathematics; creating and promoting the museums as nationally recognized destinations.
- *Outreach*: working with stakeholders in the fields of science, technology, and culture to foster science participation and innovation.
- *Collection*: enriching the collection and enhancing its national and international reputation.
- *Sustainability*: managing resources responsibly with a focus on the sustainability of the Corporation.
- *Inspiration*: implicating staff to become an employer of choice.

Planned Activities

The NMST will pursue the fourth year of its highly successful pan-Canadian initiative *Let's Talk Energy*. The NMST Let's Talk Energy Week in February 2014 was the first annual event of its kind in Canada. Canadians were encouraged to explore and discuss how energy is connected to their lives and the importance of energy systems and their elements to our economic, social, and environmental future.

Focussing on science literacy, and highlighting the farm to fork relationship, the NMST is starting a new project titled *Food Preservation: The Science You Eat*. Working with a National Advisory Committee, the Corporation will engage Canadians on the science, technology, engineering and mathematics involved in agriculture and food production.

The NMST's contribution to the celebrations marking Canada's 150th anniversary will be based on "Transforming Canada: Building on the past, making the future." While still under development, some projects could include showcasing 150 artefacts or 150 key moments that transformed Canada's history. The NMST will collaborate with both public and private sectors to finance these projects.

In recognition of the commemoration of the First World War, the Corporation produced a small exhibition on war horses at the Canada Agriculture and Food Museum (CAFM). There will also be a complete renewal of the First World War exhibition at the Canada Aviation and Space Museum (CASM).

Canada Science and Technology Museum Infrastructure Renewal

On November 17, 2014, the Government of Canada announced funding totalling \$80.5 million for the NSTM to repair, renovate and modernize the Canada Science and Technology Museum building. This funding was part of infrastructure investments by the federal government to renew and repair heritage and museum sites.

This funding is being used to implement a remediation and stabilization plan for the museum that prioritizes cleaning and removing the artefacts and exhibitions to ensure their protection and preservation. The Corporation will then proceed with a complete roof replacement and a seismic retrofit of the building's perimeter walls. The funding will also allow the museum to reopen in fall 2017 with a modernized façade and exhibition space and new and refreshed exhibits that will provide more interactivity and digital content for visitors. The Corporation is currently working on plans for this infrastructure renewal and exhibition space transformation, with work expected to begin in 2015.

1.0 MANDATE

Governing Legislation

The National Museum of Science and Technology (NMST) was established as an autonomous Crown corporation on July 1, 1990 with the passage of the *Museums Act*. The NMST functions at arm's length from Government with regard to operating and programming decisions. The NMST proudly operates the Canada Science and Technology Museum (CSTM) and two affiliated national museums; the Canada Aviation and Space Museum (CASM) and the Canada Agriculture and Food Museum (CAFM).

Under the *Museums Act*, the National Museum of Science and Technology is a distinct legal entity, wholly owned by the Government of Canada. It is subject to the financial provisions governing Crown corporations set out in Part X of the *Financial Administration Act* and is required to comply with a range of other statutes, including those governing official languages, employment equity, multiculturalism, and access to information and privacy.

Public Policy Role

The NMST's broad public policy role is expressed in the preamble of the *Museums Act*, which states that each National Museum:

- “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 “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.”

Mandate (as stated in the *Museums Act*)

“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.”

Mission

To collect, explore, and engage through science, technology, and engineering.

Vision

To inspire all Canadians to engage with their scientific and technological past, present and future.

Values

The Corporation pursues the values of Pride, Excellence, Leadership, Teamwork and Creativity in all of its endeavours.

1.1 SUPPORTING GOVERNMENT PRIORITIES

The NMST is a member of the Canadian Heritage Portfolio and contributes to the whole-of-government outcome of “a vibrant Canadian culture and heritage.” The Corporation maintains rigorous stewardship over financial resources, assets, and human resources according to the expectations set out by Government.

The Corporation’s mandate and activities are aligned with the Government’s priorities in learning, innovation, and research and development to support a knowledge-based economy. Through educational programs, informative websites, social media tools, and a variety of other platforms, the Corporation’s museums give Canadians of all ages the opportunity to see what Canadian scientists and technologists have achieved, are developing now, and are envisioning for the future. The NMST aims to inspire youth to explore careers in science, technology, engineering, and mathematics, sectors vital to Canada’s future economic prosperity.

2.0 CORPORATE PROFILE

2.1 MUSEUMS AND THE COLLECTION

The Corporation's museums and collection are housed in 19 buildings in 3 locations in Ottawa: the Canada Science and Technology Museum on St. Laurent Boulevard, with its nearby corporate offices and 3 storage facilities; the Canada Aviation and Space Museum and Hangar at the Rockcliffe Airport; and the Canada Agriculture and Food Museum at the Central Experimental Farm. All have space for exhibitions, programming, artefact storage, facility rentals, and offices.

Canada Agriculture and Food Museum

To enhance the Museum's relevance by placing a greater emphasis on food from farm to fork, the Canada Agriculture Museum was renamed the Canada Agriculture and Food Museum (CAFM) in May 2013.

The CAFM offers programs and exhibitions exploring Canada's agricultural heritage as well as the benefits of agricultural science and technology in the everyday lives of Canadians. The CAFM educational programs extend and enrich the classroom experience by bringing curricula to life. Visitors can tour a working farm in the heart of the Nation's Capital, as the CAFM houses a wide range of farm animals (including several rare breeds) that have been important to Canadian agriculture since the 17th century. The museum's well-rounded collection of artefacts and archival material, touching on all aspects of Canadian agriculture and food, from the farm to the dinner table, provides a sound foundation for research, exhibitions, and programming.

Canada Aviation and Space Museum

The extensive aviation collection of the Canada Aviation and Space Museum (CASM) is deemed by historians and museums alike to be among the best in the world. The CASM collects artefacts illustrating the development of aviation in times of peace and war, from the earliest days of manned flight to the present and into space. The museum highlights Canadian achievements in aerospace science and technology, complemented by aircraft and related artefacts from many other nations to provide an international context.

In 1964, three government-owned aeronautical collections were amalgamated and moved to Ottawa's historic Rockcliffe Airport. The collection now comprises more than 130 aircraft and a myriad of other artefacts, such as engines and propellers, aviation-related works of art, items pertaining to space flight, and outstanding library and archival resources.

Canada Science and Technology Museum (currently closed; to re-open in 2017)

The Canada Science and Technology Museum (CSTM) is Canada's only comprehensive science and technology museum. It offers dynamic exhibitions and interactive programming as a nexus of knowledge on Canadian science and technology, shared with Canadians through travelling exhibitions, an extensive website, and an active artefact loan program. It was the first museum in Canada to engage audiences through interactives in the areas of science and technology.

The NMST's collection, the most extensive research collection of scientific and technological artefacts in Canada, is particularly rich in the areas of communications, manufacturing, natural and renewable resources, scientific instrumentation, and transportation. The collection of artefacts, trade literature, documents and photographs plays a central role in exhibitions and is preserved as a resource for future generations of Canadians. Now in its fifth decade of collaboration with institutions both public and private, the CSTM continues to explore the rich connections between science, technology, society, the economy, and culture.

2.2 GOVERNANCE STRUCTURE

2.2.1 Board of Trustees

The *Museums Act* provides for a Board of Trustees, consisting of up to 11 trustees (including a Chairperson and a Vice-Chairperson), appointed by the Minister of Canadian Heritage with the approval of the Governor-in-Council. (Biographical notes and terms of the current Trustees are provided in Annex 1.)

The Board serves as the Corporation's governing body and is accountable to Parliament for the affairs of the Corporation through the Minister of Canadian Heritage and Official Languages. The Trustees, acting collectively as the Board, are responsible for overseeing the business management, activities, and affairs of the Corporation, ensuring that strategic issues are mitigated, and 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 and 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, normally held in November.

2.2.2 Board Committees

The Board is supported by four committees: the Executive Committee; the Governance Committee; the Finance, Audit and Risk Management Committee; and the Building Committee. Each committee is governed by its own Terms of Reference. Committees typically meet on a quarterly basis.

Executive Committee

The Executive Committee (EC) consists of the Chairperson, the Vice-Chairperson and two additional Trustees designated by the Board and the President and Chief Executive Officer (CEO) who sits as a non-voting member. The Committee establishes the annual performance objectives for the CEO for Board approval.

Finance, Audit and Risk Management Committee

The Finance, Audit and Risk Management (FARM) Committee oversees the Corporation's financial management controls, its practices and its information systems. The Committee reviews and advises the Board of Trustees on the Corporation's five-year operating capital plans, as well as the annual and quarterly financial statements. The FARM Committee also selects internal audits and reviews and advises the Board of Trustees on plans and reports from internal and external auditors. In addition, it provides oversight of risk management policies and practices within the Corporation.

Governance Committee

The Governance Committee (GC) monitors and reviews best practices for corporation governance and stewardship, and recommends appropriate changes to enhance operation and decision-making. The Governance Committee supports the Board's responsibility for succession planning.

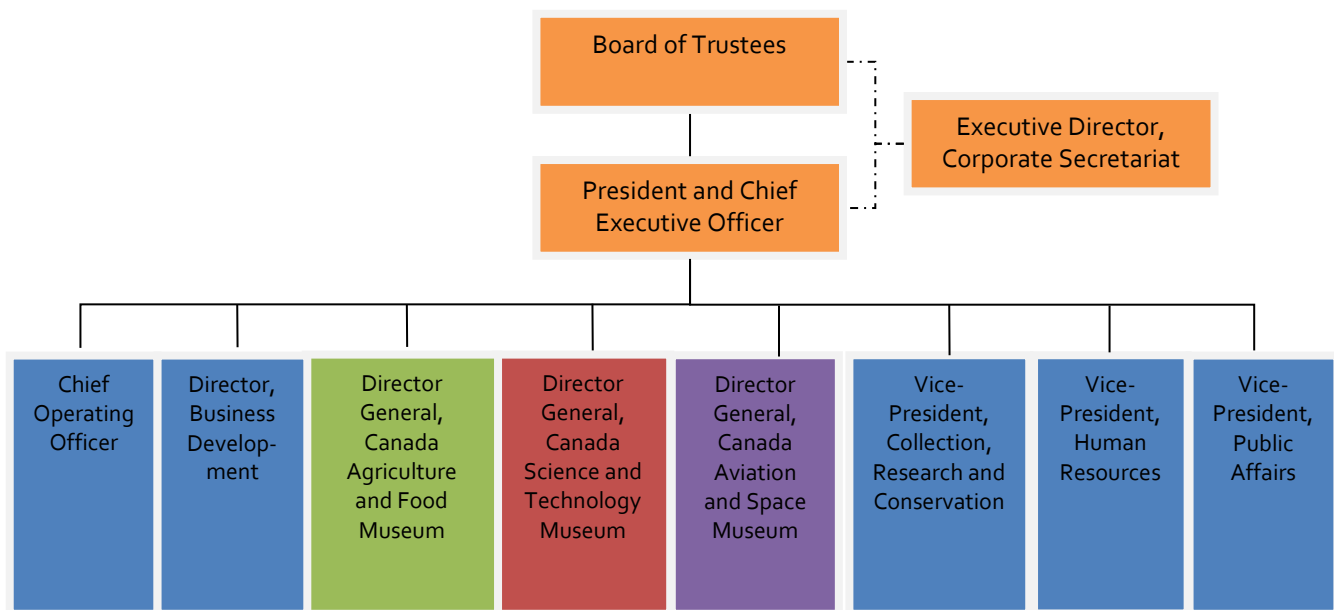
Building Committee

The Board of Trustees established a new Building Committee in December 2014 in light of the Corporation's large-scale infrastructure project as well as the long-term infrastructure plans for all three museums. The Terms and References and membership for this new committee will be adopted in early 2015–2016.

2.2.3 Executive Leadership Team

The Corporation’s daily operations are managed by its President and Chief Executive Officer (CEO), who is supported by an executive leadership team. The executive managers include the Chief Operating Officer, the director general of each Museum, the newly created Director, Business Development, the Vice-President Collection, Research and Conservation, Vice-President Human Resources, Vice-President Public Affairs, and the Executive Director, Corporate Secretariat (see Organisation Chart 1).

**Organisation Chart 1
Corporate Reporting Structure**



2.3 THE CSTMC FOUNDATION

On November 14, 2007, a distinct, arm’s-length Canada Science and Technology Museums Corporation Foundation was incorporated to complement and strengthen the Corporation’s programming by raising funds in support of the NMST. The Foundation, led by a Board of Directors, undertakes a range of philanthropic initiatives.

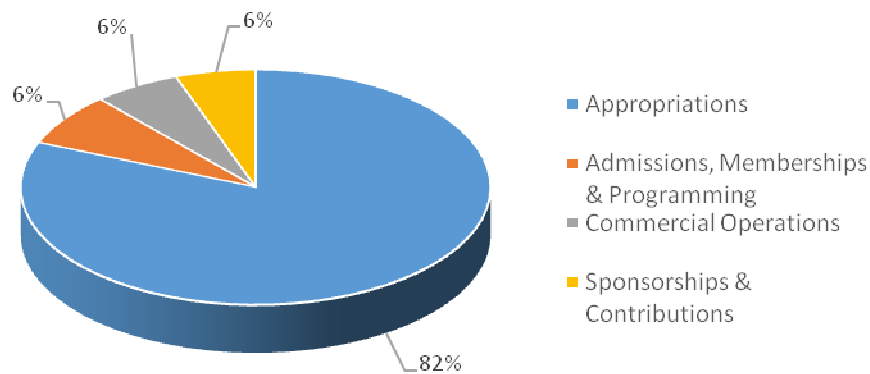
Since its creation, the Foundation has raised revenues and contributions of close to \$3 million through unique fundraising events, annual campaigns and solicitations of major gifts. During that period, the Foundation has made contributions to the NMST for more than \$850,000.

2.4 RESOURCES AND EXPENSES

2.4.1 Funding and Revenues

In 2014–2015, the NMST will receive a base appropriation of \$26.862 million for operating and capital for the three museums. In addition to the base appropriation, the NMST is expected to receive supplementary appropriations of \$6.279 million in 2014–2015 to begin implementation of the CSTM building remediation and stabilization plan. This amount is included in the \$80.5 million that the Government of Canada has announced for the Corporation to fix the facility and modernize the CSTM. Chart 1 illustrates the portion of the Corporation’s budget that each source of funds will represent. The Corporation also expects another self-generated \$5.835 million, as identified in Chart 1, below.

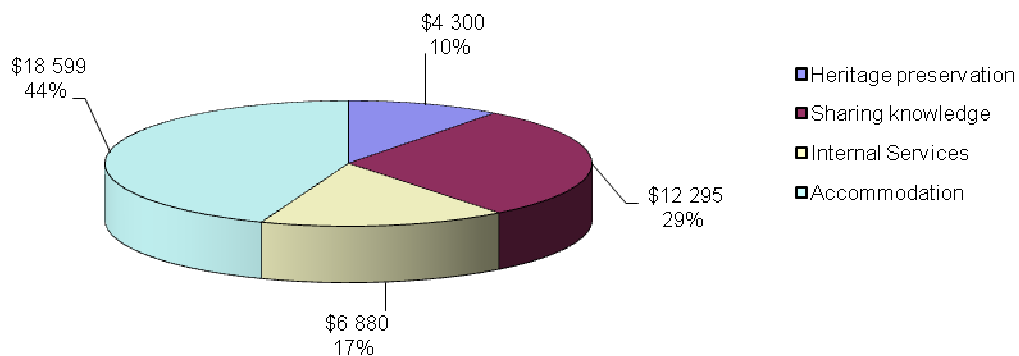
Chart 1
Source of Funds 2014–2015



2.4.2 Expenditures and Expenses

In 2014–2015, the Corporation will devote 54% of its operating budget to Heritage Preservation and Sharing Knowledge programs, which reflect the NMST’s mandate, while the remaining 46% will be spent on Accommodations and Internal Services (see Chart 2, below). Internal Services support all of the Corporation’s activities and include costs pertaining to governance, management, and reporting requirements, as well as efforts to increase revenue-generation through sponsorships and commercial activities. The Accommodation expenditures are used to operate the Corporation’s museums’ facilities.

Chart 2
Expenditures by Program 2014–2015
(in thousands of dollars)



2.4.3 Full-Time Equivalent (FTEs)

The Corporation’s knowledgeable and dedicated employees are its greatest asset and key to its success. Collectively, NMST staff strives to fulfill the Corporation’s mandate by inspiring Canadians to understand and engage with science, technology, engineering, and mathematics and in making their visit to the Museums an educative, inspiring, and memorable experience. At the start of 2014–2015, the Corporation counted 226 full-time equivalent positions. This number will be reduced due to the CSTM closure.

3.0 STRATEGIC ISSUES

3.1 ENVIRONMENTAL SCAN

3.1.1 Economic Climate

While the Canadian economy is recovering modestly from the recent downturn and with a healthy economic outlook for 2014, the jobless rate is still high. The discretionary income of Canadian families continues to be restrained, which impacts tourism numbers. The Corporation's commercial revenue is dependent on visits and can be negatively affected by a decline in tourism. The NMST will continue to monitor trends in the Canadian economy and the tourism industry in the context of pricing and revenue projections.

3.1.2 Alternative Funding

Alternative funding methods are growing in popularity. In addition to rallying donors for large sponsorship deals, many institutions are also pursuing micro-giving. Crowd funding platforms, such as Kickstarter and Indiegogo, reach both national and international communities and allow donors to help fund special projects submitted by individuals or organisations. In 2013, Canadian donors provided \$29 million to a variety of Kickstarter projects. The Corporation will explore possible projects that could be funded using these methods.

3.1.3 Demographics

To remain relevant to the citizens they serve, the museums must be aware of changing demographics in Canadian society. Most notably, Canada is experiencing an aging and increasingly diversified population, with Aboriginal people being one of the fastest growing segments.

The face of the museum visitor is changing and enriched with these demographic trends. Museums will examine ways that they can adjust their programming and services to account for an aging and increasingly diverse population and emerging communities. The NMST will take these factors into consideration when developing programming and other offerings to be more inclusive of all visitors.

3.1.4 The Digital Environment and Outreach

National outreach remains a top priority for the NMST. Virtual connections and conversations will continue to be a primary way of engaging Canadians in discussions on science, technology, engineering, and mathematics. Social media is an increasingly

popular engagement tool for communicating with Canadians and promoting museum events through tools such as Facebook, Twitter, Snapchat or LinkedIn. Social media connections can benefit museums in terms of growing community engagement by inviting the community to participate in the decision-making process. The NMST will build on its current social media strategy and engage with Canadians across the country and abroad and tap into online communities for ideas related to exhibitions and programming.

Mobile Applications (Apps) are currently a huge trend, and they are likely to grow in popularity as Canada experiences one of the highest penetration rates of smart phones and tablets per capita. As for using Apps in museums, trends are emerging that use location awareness and GPS to provide supplemental information to the visitor about the museum itself, an exhibition, an artefact, or even guide visitors through the physical museum. The evolution of large-scale application software systems to mobile applications is also important to consider as this could afford the Corporation interesting opportunities to share the national collection on a grand scale. The Corporation will investigate the best use of content-rich mobile Apps for both on-site applications and outreach opportunities.

3.2 RISKS AND MITIGATION STRATEGIES

The Corporation conducts an annual SWOT analysis (Strengths, Weaknesses, Opportunities, and Threats) to identify the risks and assess the possibility of the NMST achieving its objectives. This includes identifying strategies to effectively and proactively address the risks as much as possible. The following three risks were identified as ranking highest in terms of impact and/or likelihood.

Risk: *A reduction in revenues due to the closure of the CSTM.*

The Corporation's viability is dependent on its capacity to generate revenue. This challenge has been magnified by closing the CSTM until 2017. The closure has prompted a number of members to ask for complete or partial reimbursement of their memberships.

Mitigation: An increase in commercial activities will broaden the range of products available for sale at the boutiques, revamp the online boutique and create a more dynamic facility rental program. Due to the CSTM closure, members will be offered new programs such as "members only" collection tours and invitation-only events (currently under development) that will still provide excellent value for CAFM and CASM members.

As the NMST is using the \$80.5 million that is being provided by the Government of Canada to repair, renew and modernize the CSTM, it is anticipated that the CSTM will be able to contribute to the revenue generating capacity of the NMST when it reopens in 2017.

Risk: *The widening gap between operating costs and funds and the resulting loss of relevance due to limited capacity to invest in programming and exhibitions.*

Appropriations are not indexed to protect the Corporation against the impact of inflation on utilities, property taxes and other fixed costs. With each passing year, this represents a greater financial challenge as costs rise but base appropriations do not. The Corporation uses an increasing portion of its funding to pay for public facility operations, collection storage and office space, as well as to contribute to the salary envelope. There is a risk of incurring operating losses in any given year should there be a sudden significant increase in operating costs.

Mitigation: For the 2014–2015 fiscal year, the Corporation conducted a zero-based budgeting exercise. This budgeting method allows an organization to comprehensively examine its base spending in order to assess the implications of the decisions associated with particular levels of service. In zero-based budgeting, every line item of the budget must be approved, rather than only the variances from previous years, as is typical of incremental budgeting. Because previous spending is not considered an automatic given, each amount is re-evaluated. Through this exercise, the Corporation focused on identifying revenue generating programs and products, and seven positions were affected. In addition, the Capital Budget has been reduced by \$100,000 to \$700,000 to help alleviate operating pressures. In addition, a portion of the \$80.5 million that the NMST is receiving from the Government of Canada will be used to modernize its programming and exhibition space.

Risk: *Endangering the national collection due to inappropriate storage conditions and mold on artefacts housed in the CSTM.*

The Corporation is responsible for an extensive collection of scientific and technological artefacts and materials. The collection is housed in three leased warehouse buildings that are at 130% capacity, providing a challenge for acquiring new artefacts to enhance the collection. Moreover, the non-purpose-built buildings have inadequate temperature and humidity controls, resulting in accelerated artefact deterioration that makes them unsuitable for preserving Canada's material history. In September 2014, the Corporation discovered mold growing inside the CSTM and tests revealed unacceptable levels of toxic mold spores in the air and covering the artefacts and exhibitions.

Mitigation: Efforts to resolve accommodation issues for the national collection are a priority for the Corporation. The NMST continues to investigate fiscally responsible options for funding the construction of a purpose-built collection reserve storage facility and some options could include public-private collaborations, subletting space and generating revenue through short-term land leases. In the interim, the Corporation is carrying on with the Collection Rationalization Project (CRP) to manage its collection and find efficiencies. While the main purpose of the CRP has been to improve the national collection and make artefacts accessible for display and research, a by-product of this ongoing project identifies objects that are duplicates, damaged beyond repair, hazardous, or simply not relevant to the NMST national collection. In doing so, approximately 750 m² of storage space was recuperated in 2013–2014, and the Corporation is on track to surpass that in 2014–2015. Many of the artefacts still in excellent condition have been transferred to a variety of heritage and educational organizations across Canada.

The Corporation is using a portion of the \$80.5 million that the Government of Canada is providing to implement a remediation and stabilization plan that addresses mold inside the CSTM. This includes artefact and exhibition decontamination and removal off-site to ensure preservation. Artefacts too large and too fragile to move will be cleaned and covered. This work has already begun and is expected to be completed by February 2015.

3.3 HIGHLIGHTS AND CHALLENGES FROM 2013–2014

3.3.1 Highlights

As the Corporation reflects on 2013–2014 mid-year results, several successes have been realized. These include:

- **Star Wars™ Identities:** This blockbuster exhibition opened at the Canada Aviation and Space Museum to much anticipation and excitement. The Corporation's first blockbuster exhibition was both a financial and visitor success. Due to its popularity, the exhibition run was extended an additional six weeks.
- **Visitor experience:** As testament to its long-standing popularity, the Canada Science and Technology Museum welcomed its 20 millionth visitor during the summer of 2013.

- **Facilities:** To accompany the new name, the Learning Centre opened at the Canada Agriculture and Food Museum to reflect the importance of food as part of the Museum’s mandate. The Centre, which now has three classrooms to help meet popular programming demands and visitor amenities to allow the CAFM to be open year-round, was officially inaugurated in May 2013.
- **Tools and technology:** After resolving some initial problems with the technology in 2012–2013, this year’s online registration for summer camps was a tremendous success, with over 96% of camps filled to capacity.
- **International Conference:** The Corporation hosted the “Big Stuff” international conference on collections preservation and conservation. With 70 participants from 6 countries, this was the first time the conference was held in North America, thanks to the reputation of the NMST conservation experts.
- **Collection:** Unveiled by Colonel Chris Hadfield as commander of the International Space Station while in space, the Canadarm 1 has a permanent place on the CASM floor for all Canadians to visit this iconic Canadian innovation and be inspired.

3.3.2 Challenges and Lessons Learned

The Corporation has faced a number of challenges throughout 2013–2014 and has learned key lessons and adjusted its plans to meet these challenges:

- **Paid parking:** To help increase revenues, the Corporation implemented paid parking at all three museum sites in 2013. All other national museums in the Canada’s Capital Region charge for parking on their sites. While there was initial resistance, a strong communications plan and accommodations made for members, smoothed the transition. The Corporation collected revenues, which will be primarily invested in programming at each museum.
- **Digitization of the Collection:** The digital collection plan continues to see little progress due to lack of resources. The Corporation is re-evaluating the project to determine the best way forward.

4.0 KEY RESULT AREAS AND STRATEGIC OBJECTIVES

4.1 PLANNING PROCESS

The 2014–2015 to 2018–2019 planning period is staying the course for the long-term corporate objectives established by the Board of Trustees in 2010–2011. The Board of Trustees approved this Corporate Plan (2014–2015 to 2018–2019) first in November 2013 and then in November 2014, with revisions pertaining to the Canada Science and Technology Museum closure and subsequent funding announcement.

Compared to 2013–2014, several strategies, activities and performance indicators were revised or removed until 2017 to reflect the Canada Science and Technology Museum remedial and renewal work.

4.2 PROGRAM ALIGNMENT ARCHITECTURE AND KEY RESULT AREAS

The Program Alignment Architecture (PAA) is a framework describing the Corporation's programs to achieve overall strategic outcomes. The Corporation establishes plans and priorities and receives parliamentary appropriations according to the PAA.

Using the PAA framework, the Corporation established five Key Result Areas (KRAs), which serve as goals for the Corporation's programs. Each KRA has performance indicators that can be monitored to assess performance. Table 1 presents the five KRAs and their strategic objectives, aligned with the PAA framework.

Table 1
Key Result Areas According to the Program Alignment Architecture

PROGRAM	KEY RESULT AREA (KRA)		
SHARING KNOWLEDGE Interpretation of the collection and demonstration of scientific and technological products and processes to Canadians.	KRA 1: Share knowledge through our programs and compelling visitors' experiences Outcome: We engaged Canadians with the past, present and future of science, technology and society through rich and compelling experiences.	KRA 2: National presence, participation and outreach Outcome: We increased our outreach in all provinces and territories with a variety of stakeholders involved in science, technology and culture.	
HERITAGE PRESERVATION Corporate activities dedicated to developing and preserving the collection.	KRA 3: An internationally renowned collection Outcome: We enriched the collection and enhanced its national and international reputation.		
INTERNAL SERVICES Stewardship and management of corporate infrastructure, resources and services.	KRA 4: Corporate sustainability Outcome: Demonstrated responsible management and governance of financial and other resources.	KRA 5: Become an employer of choice Outcome: We attracted, developed, supported and retained a highly skilled, dynamic and diverse workforce.	
ACCOMMODATIONS The physical environment required to house, protect and display the collection; the public facilities where hundreds of thousands of onsite visitors are welcomed each year; and office and administration space for staff.	KRA 1: Share knowledge through our programs and compelling visitors' experiences Outcome: We created nationally recognized destinations for all Canadians.	KRA 3: An internationally renowned collection Outcome: We enriched the collection and enhanced its national and international reputation.	KRA 4: Corporate sustainability Outcome: We demonstrated responsible management and governance of financial and other resources.

4.3 STRATEGIES AND ACTIVITIES

For each Key Result Area (KRA), the Corporation has identified strategies, activities, performance indicators and measures for 2014–2015, as well as strategies for the subsequent four years of the planning period. The Corporation will present an assessment of its performance in the corresponding annual report that will be prepared at the end of the fiscal year.

4.3.1 KRA 1: Share knowledge through our programs and compelling visitors' experience

The Corporation continues to pursue two strategic objectives under KRA 1:

1. Ensure relevant, engaging, distinctive, innovative, and entertaining visitor experiences at the three museums.
2. Continue to pilot transformational museum projects.

Planned activities to support these objectives include:

- Opening the *Food Preservation: The Science You Eat* exhibition at the CAFM;
- Refreshing the First World War exhibition at the CASM in time for the 100th year commemoration and towards Canada's 150th anniversary;
- Planning for modernization of CSTM exhibition spaces; and
- Developing consistent brand recognition in the marketplace.

Each museum offers experiences for visitors that promote curiosity and engage and encourage visitors to ask questions. Visitor Experience staff at the three museums are able to increase visitors' understanding of the role that science, technology, engineering, and mathematics continue to play in Canada's society. Visitors to the CAFM are encouraged to use all five senses as they experience a working farm in the nation's capital, which moved to operating 12 months a year for the first time and now includes the topic of food science. At the CASM, visitors enjoy a lively interactive experience with aircraft and aerospace objects in an incredible venue alongside an active airport. When open, the CSTM offers its visitors a dynamic demonstration of Canada's transformation through scientific and technological achievement, allowing them to experience real artefacts and engaging interactive displays.

The CAFM and CASM will maintain their efforts to rejuvenate existing exhibitions and programming to promote the visitor experience. At current funding levels however, new exhibitions and programming are limited.

The Corporation will continue to roll out the branding strategy, which will support its efforts to ensure the best visitor experience for all visitors. The Corporation will also continue to study visitors' needs and interests by engaging them through surveys, program assessments, comment cards and exhibition evaluations.

With the financial support of the CSTMC Foundation, the Corporation will also embark upon the development and implementation of pilot projects to transform the visitors' museum experience, be it online or through other outreach programs. Successful projects would be used as the groundwork to create transformative museum experiences at the three museums.

Strategic Objective 1.1: Ensure relevant, engaging, distinctive, innovative and entertaining visitor experiences and reflect the new brand at the NMST museums.					
	2014–2015	2015–2016	2016–2017	2017–2018	2018–2019
Strategies	<p>Augment and diversify museum services and products related to Canada’s 150th anniversary.</p> <p>Continue to implement the new brand in floor design, programs, website content and promotional activities.</p> <p style="padding-left: 40px;">Implement brand in floor design, programs, website content and promotional activities.</p> <p style="padding-left: 80px;">Implement brand in floor design, programs, website content and promotional activities.</p> <p>Begin planning for modernization of CSTM exhibition space.</p> <p style="padding-left: 40px;">Continue planning modernization of CSTM exhibition space.</p> <p style="padding-left: 80px;">Design, fabrication and installation of modernized CSTM exhibition space.</p> <p style="padding-left: 120px;">Complete installation and reopen CSTM.</p> <p>Develop and test philanthropically funded projects/activities/programs associated with the museums’ transformation of the visitor experience.</p>				
<i>Outcome 1.1: We engaged Canadians in the past, present and future of science, technology and society through rich and compelling experiences.</i>					
Strategic Objective 1.2: Continue to pilot transformational museum projects.					
	2014–2015	2015–2016	2016–2017	2017–2018	2018–2019
Strategy	Support the CSTMC Foundation in developing and implementing fundraising for transformational museum projects.				
<i>Outcome 1.2: We created nationally recognized destinations for all Canadians.</i>					

PERFORMANCE MEASURES and INDICATORS	
Measures/Indicators	Targets 2014–2015
- Attendance targets at the three museums	- CASM: 185,000; CSTM: 165,000*; CAFM: 165,000
- Visitor satisfaction/engagement rate from yearly visitor survey review	- 90% visitor satisfaction
- Number of new exhibitions and displays in each museum	- Previous year's result (19 new exhibitions and displays)

* Note: Due to the museum's closure on September 11, 2014, the CSTM attendance target was revised. Prior to closure, attendance was 165,638.

4.3.2 KRA 2: National presence, participation, and outreach

The Corporation is continuing to pursue three strategic objectives under KRA 2:

1. Strengthen and expand national outreach.
2. Increase access to museum content.
3. Develop and participate in national and international programs and events in order to promote science, technology, engineering, and mathematics (STEM).

Planned activities to support these objectives include:

- Continue to enhance social media presence;
- Move forward with the development of a plan to get more artefacts online;
- Develop projects for the commemoration of Canada's 150th anniversary;
- Product development for commemorations; and
- Deliver another successful Summer Institute for Elementary Teachers (SIET).

To effectively increase national presence and outreach, the Corporation's museums must maximize their national recognition as trusted authorities and leaders in their field. To pursue these objectives, the Corporation's focus on digitization will include rolling out new websites, continuing social media leadership, and creating better access to 2-D and 3-D collections. The NMST will also leverage the growing success of the Summer Institute for Elementary Teachers, expand the reach and accessibility to the artefact loans program to other institutions and communities across Canada, as well as host and/or participate in national conferences.

The Let's Talk Energy pan-Canadian project is in the fourth year of its six-year initiative. The CSTMC will continue to work with other science institutions and government departments and agencies at all levels to keep on improving energy literacy across the country.

The theme the Corporation has developed for Canada's 150th anniversary products and programs is "Transforming Canada: Building on the Past, Making the Future." While in the early stages of development, some projects could include: an exhibition showcasing 150 artefacts which helped transform Canada; outreach programs to key locations across the country to showcase 150 transformational moments in Canada's history; or collaborations with museums, large and small, across Canada to help them tell the story of how their community helped transform Canada. For these projects the Corporation will be seeking sponsorship and collaborations.

CASM developed a mobile app based on First World War airplanes and their pilots. Ace Academy teaches players how to fly the fragile wood and fabric planes found in the CASM collection. The flight instructor guides players through flight training and prepares them to take command of a First World War bi-plane. The app has already been downloaded over 10,000 times in over 110 countries around the world.

During the CSTM closure until 2017, the Corporation will increase its National Outreach programming. It will develop, create, and produce products that reach, connect, and engage with new and existing audiences outside of the museums. Efforts to bring the science and technology national collection to Canadians from coast to coast to coast will increase, including a more rigorous travelling exhibition schedule and artefact loan program. Providing more digital programs, such as collection tours and education programming via Skype and other similar platforms, will increase national presence and awareness of the collection.

Strategic Objective 2.1: Strengthen and expand national outreach.					
	2014–2015	2015–2016	2016–2017	2017–2018	2018–2019
Strategies	Implement and maintain enhanced social media strategy. Review the national education strategy. Implement changes to the national education strategy.				

Strategic Objective 2.2: Increase access to the museums' content.					
	2014–2015	2015–2016	2016–2017	2017–2018	2018–2019
Strategies	Implement and maintain phase 2 and 3 of Content Management System (CMS). Implement and maintain phase 3 and 4 of CMS. Ongoing maintenance of CMS. Implement digital collection plan. Review and update digital collection plan.				
Strategic Objective 2.3: Develop and participate in national and international programs and events in order to promote science, technology, engineering, and mathematics (STEM).					
	2014–2015	2015–2016	2016–2017	2017–2018	2018–2019
Strategies	Year 4 of 6 of the Let's Talk Energy initiative. Year 5 of 6 of the Let's Talk Energy initiative. Year 6 of 6 of the Let's Talk Energy initiative. Review and deliver the Summer Institute for Elementary Teachers (SIET). Enhance and expand SIET. Deliver seventh SIET. Deliver eighth SIET. Pursue other leads for Canada's 150th anniversary celebrations. Develop a nationwide initiative related to Canada's 150th anniversary celebrations. Prepare for celebrations. Celebrate Canada's 150th anniversary. Host and actively participate in conferences, workshops, symposiums and expand yearlong outreach and teachers' networks.				
<i>Outcome: We increased our outreach in all provinces and territories with a variety of stakeholders involved in science and technology culture.</i>					

PERFORMANCE MEASURES AND INDICATORS	
Measures/Indicators	Targets 2014–2015
- Virtual visitor targets	- 3% increase in virtual visitors
- Number of travelling exhibitions / number of venues / numbers of visitors	- Previous year's result (8 travelling exhibitions / 25 venues / 5,700,000 visitors)
- Number of artefacts on loan / number of venues / number of visitors	- Previous year's result (387 artefacts / 57 venues / 2,833,256 visitors)
- Number of conferences, workshops and symposiums attended by staff	- Previous year's result (46 conferences, workshops, symposiums)

4.3.3 KRA 3: An internationally renowned collection

The Corporation is continuing to pursue four strategic objectives under KRA 3:

1. Update and implement the Collection Development Strategy (CDS).
2. Manage the care of the national collection.
3. Review and update the Collection Rationalization Project (CRP).
4. Increase awareness of the 3-D and 2-D collections.

Planned activities to support these objectives include:

- Review research subject areas to better reflect the needs of the collection;
- Continue the long-term preservation and care of the collection;
- Continue collection assessments and pursue accelerated deaccessioning with the renewed process to support the Collection Rationalization Project; and
- Decontaminate and remove artefacts from the CSTM.

Praised as a model of rigour and efficiency by a number of international museological institutions, the Collection Rationalization Project (CRP) continues to direct how the Corporation approaches the development of its collection. The CRP consists of historical research, which produces Historical Assessments (HAs) that identify and analyze concepts, ideas and objects key to the historical development of each main subject area and Collection Assessments (CAs), which compare the profile of the existing collection with an ideal collection. This understanding of each section of the collection informs recommendations for acquisitions as well as deaccessions.

Deaccessioning has become an important priority for the development of the collection. With the collection reserve space at 130% capacity, deaccessioning is the main solution for gaining the space required to acquire important artefacts to complete the collection and better tell the story of Canada. The CRP also updates the inventory of artefacts and could aid in preparing a move to a new purpose-built collection reserve facility.

The Corporation’s expert conservation, collections and technical service teams will be mobilized to clean, disassemble and crate all of the artefacts currently in the CSTM that are small enough to be moved by an individual. The large and heavy artefacts will be crated and moved by a professional moving company that specializes in large industrial object transportation. Up to eight artefacts may remain in the museum due to their size and moving complexity. Those artefacts will be protected by plastic sheeting and plywood enclosures, once cleaned of all mold particles.

Strategic Objective 3.1: Update and implement the Collection Development Strategy.					
	2014–2015	2015–2016	2016–2017	2017–2018	2018–2019
Strategies	<p>Implement the research plan as it relates to the history of science and technology in Canada, the needs and growth of the collection, and the requirements of the exhibition plan primarily through historical assessments.</p> <p>Acquire artefacts to reveal Canada’s unique science and technology story (past, present, and future).</p>				
Strategic Objective 3.2: Manage the care of the national collection.					
	2014–2015	2015–2016	2016–2017	2017–2018	2018–2019
Strategies	<p>Implement preservation and conservation standards. Review current preservation and conservation standards. Maintain preservation and conservation standards.</p> <p>Ensure the appropriate documentation of the collection. Continue to ensure the appropriate documentation of the collection.</p> <p>Clean, crate and remove artefacts from CSTM and deliver to temporary storage.</p>				

Strategic Objective 3.3: Review and update the Collection Rationalization Project (CRP).					
	2014–2015	2015–2016	2016–2017	2017–2018	2018–2019
Strategies	Advance Collection Assessments. Implement renewed deaccessioning process. Maintain deaccessioning and disposal plan.				
Strategic Objective 3.4: Increase awareness of the 2-D and 3-D collections.					
	2014–2015	2015–2016	2016–2017	2017–2018	2018–2019
Strategies	Review and explore opportunities to deliver sixth Reading Artefact Summer Institute (RASI) to a wider audience. Deliver RASI yearly.				
<i>Outcome: We enriched the collection and enhanced its national and international reputation.</i>					

PERFORMANCE INDICATORS	
Measures/Indicators	Targets 2014–2015
- Number of acquisitions: past, present, future	- Previous year's result (149 acquisitions)
- Number of artefacts catalogued according to Corporate standards	- Previous year's result (54% catalogued)
- Number of deaccessions / storage space recovered	- Previous year's result (48 deaccessions / 753 m ²)
- Number of completed Collection Assessments (CAs)	- 4 completed CAs
- Percentage of collection accessible online	- Previous year's result (96%)

4.3.4 KRA 4: Corporate Sustainability

The Corporation is continuing to pursue four strategic objectives under KRA 4:

1. Enhance and strengthen cooperative relationships aimed at broadening community support.
2. Diversify and increase revenue sources.
3. Ensure sound and efficient corporate and fiscal governance.
4. Implement appropriate infrastructure and technologies.

Planned activities to support these objectives include:

- Prepare mold remediation and stabilization plan for the CSTM and commission studies and substantive cost estimates for repairs;
- Begin implementation of the Digital Asset Management plan;
- Pursue the collaborative relationship with the Canada Space Agency;
- Pilot a crowd funding project;
- Begin the CSTM remediation project; and
- Revamp facility rental processes and procedures.

The Corporation will undertake a large capital project to permanently resolve infrastructure issues at CSTM. In November 2014, the Government announced that it would provide infrastructure funding to replace the roof and reinforce the walls and fire-suppression system to withstand seismic disturbances. Included in the announcement was funding to modernize the exterior façade and renovate the interior exhibition space of the museum for a planned re-opening in 2017. (For more details, please see Section 5.3.3, Major Capital Projects.)

The NMST is constantly striving to improve the ways in which it pursues its objectives and conducts its affairs while maintaining highly effective resource stewardship and sound corporate governance.

Increasing revenue generation remains a high priority for the Corporation. The NMST will continue to focus its efforts on obtaining sponsorships and donations, developing cooperative relationships and putting a greater emphasis on increasing philanthropic activities. The CASM will conduct a pilot funding project using the crowd funding website Indiegogo. Funds raised will go towards production costs of the Legacy Project videos — oral histories of the Second World War. One of the Corporation's key drivers for success is developing collaborative approaches and presenting a diverse range of offerings and engagement opportunities for a variety of organizations and individuals.

As a committed global citizen, the NMST will continue to look for eco-friendly efficiencies to help create a greener Canada.

As for digitization, in addition to implementing the Information Management system the Corporation will promote the use of new technology internally, providing staff with more effective tools and systems, strengthening and engaging the entire workforce. The digital platform for the NMST supports all activities from human resource management to data management to corporate sustainability. The Corporation will continue to improve, support, and create opportunities to use digitization to the benefit of activities, enhancing their efficiency and productivity. The Corporation is also actively exploring how to better tap into the Government of Canada's shared services.

Strategic Objective 4.1: Enhance and strengthen cooperative relationships aimed at broadening community support.					
	2014–2015	2015–2016	2016–2017	2017–2018	2018–2019
Strategies	Monitor and review sponsorship framework. Develop a volunteer recruitment and retention strategy. Implement the volunteer recruitment and retention strategy.				
Strategic Objective 4.2: Diversify and increase revenue sources.					
	2014–2015	2015–2016	2016–2017	2017–2018	2018–2019
Strategies	Increase and diversify commercial operations. Review all revenue generating programs. Implement greening initiatives to optimize facilities and contribute to a greener Canada.				
Strategic Objective 4.3: Ensure sound and efficient corporate and fiscal governance.					
	2014–2015	2015–2016	2016–2017	2017–2018	2018–2019
Strategies	Develop, implement, and improve digitization of operational processes and tools. Optimize fiscal management processes. Develop a new five-year strategic plan. Implement the new five-year strategic plan.				

Strategic Objective 4.4: Implement appropriate infrastructure and technologies.					
	2014–2015	2015–2016	2016–2017	2017–2018	2018–2019
Strategies	<p>Integration of workflows into the Information Management (IM) plan. Maintain IM plan. Evaluate and adjust IM plan. Maintain the IM plan.</p> <p>Installation of the Digital Asset Management (DAM) system and implementation of Phase 1 of project. Implementation of Phase 2 of the DAM project. Maintain DAM system and contribute additional digital collections. Evaluate DAM system and its functionality. Monitor DAM system.</p> <p>Implement the NMST Capital Plan.</p> <p>CSTM mold remediation and call for cost estimates for roof replacement and seismic retrofit. Begin Infrastructure Renewal Project. Continue and finish Infrastructure Renewal Project. Re-open the CSTM.</p>				
<i>Outcome: We demonstrated responsible management and governance of financial and other resources.</i>					

PERFORMANCE MEASURES AND INDICATORS	
Measures/Indicators	Targets 2014–2015
- Amount of operating revenue generated	- \$5.835M in revenue generation
- Amount of contributions from donations, sponsorships and in-kind	- \$600,000 in kind
- Percentage of capital projects finished on time and on budget	- 90% of projects completed on time and on budget
- Number of greening initiatives and efficiencies	- 1 greening initiative

4.3.5 KRA 5: *Become an employer of choice*

The Corporation is pursuing three objectives under KRA 5:

1. Develop a culture of collaborative entrepreneurship (innovations and efficiencies) in all staff.
2. Strengthen and engage the NMST workforce.
3. Foster leadership and provide career development opportunities corporate-wide.

Planned activities to support these objectives include:

- Continue to offer thematic management sessions on a variety of relevant topics;
- Review internal communications platforms; and
- Perform an audit of the joint Health and Safety Committee.

A highly skilled workforce remains one of the Corporation’s greatest assets. Dedicated to fostering leadership and providing career development opportunities to all staff, the Corporation will continue to offer training and development to staff in order to foster entrepreneurship, effective communication, and leadership opportunities across the Corporation.

The Corporation fully understands its fiscal reality and aims to move forward. To do so, a more entrepreneurial approach will need to be cultivated corporate-wide. This focus on entrepreneurship in 2014–2015 promises to be a catalyst for transformation and to create long-term solutions by building on grassroots projects and initiatives.

Strategic Objective 5.1: Develop a culture of collaborative entrepreneurship (innovations and efficiencies) in all staff.					
	2014–2015	2015–2016	2016–2017	2017–2018	2018–2019
Strategies	Implement entrepreneurial ideas and training. Assess and review entrepreneurial approaches.				
Strategic Objective 5.2: Strengthen and engage the NMST workforce.					
	2014–2015	2015–2016	2016–2017	2017–2018	2018–2019
Strategies	Maintain performance process and tools. Review performance management process and tools. Ensure that each sector has an involved workforce, that employees have a clear understanding of and commitment to corporate values and strategic directions, and that they realize their full potential.				

Strategic Objective 5.3: Foster leadership and provide career development opportunities corporate-wide.					
	2014–2015	2015–2016	2016–2017	2017–2018	2018–2019
Strategies	Implement training development strategy for staff and managers centred on entrepreneurship, visitor experience, and digitization. Continue employee recognition program. Encourage communities of practice.				
<i>Outcome: We attracted, developed, supported and retained a highly skilled, dynamic and diverse workforce.</i>					

PERFORMANCE INDICATORS	
Measures/Indicators	Targets 2014-2015
- Number of opportunities for management to involve staff in corporate priorities and direction	- Previous year's result (10 opportunities)
- Number of training hours for staff corporate-wide	- Previous year's result (2,635 hours.)

5.0 FINANCIAL DISCUSSION

5.1 OPERATING BUDGET

5.1.1 Operating budget

In 2014–2015 the Corporation will receive an annual base parliamentary appropriation of \$26.9 million on a cash basis: \$26.2 million for operating and \$700,000 for capital.

Additional funding is being provided to implement a remediation and stabilization plan for CSTM, \$6.3 million of which the Corporation expects to receive in 2014–2015.

The NMST total appropriations for the fiscal year 2014–2015 are \$33.141 million on a cash basis. Appropriations have been reported on a cash basis except for the appropriation amount presented in the Statement of Operations (please see Table 2, below), which is reported on an accrual basis in accordance with the Canadian Public Sector Accounting Standards applicable to government-not-for-profit organizations. On the basis of accrual accounting, the amount of \$35,641,000 is being reported as parliamentary appropriations in the financial statements for fiscal year 2014–2015.

Revenues generated by the Corporation are used to supplement its operating budget. Due to the closure of the CSTM in September 2014 (to re-open in 2017), the Corporation is forecasting revenues of \$5.835 million, \$1 million less than originally forecast. The Corporation will post a deficit in 2014–2015 and will use its unrestricted net assets accumulated in 2012–2013 to cover the deficit.

The Corporation's parliamentary appropriations are not adjusted to take into account the rising cost of operating its facilities or delivering programming, which increase at roughly the rate of inflation. As funding is not indexed, the NMST must find ways to absorb the increasing cost of expenses by reducing personnel, programs, and services in order to balance.

In an effort to absorb unforeseen costs, the Corporation will continue to pursue the following strategies to limit operating losses for 2014–2015:

- find operational efficiencies;
- maintain reduced levels of travel and hospitality expenses;
- evaluate relevancy of existing programs and reduce or reallocate funds as appropriate; and
- increase sponsorship, philanthropic opportunities, and commercial operations.

In addition to the preceding strategies to balance the budget, the Corporation has implemented, and continues to pursue, an array of cost-reduction measures to respond to financial pressures over the years, including:

- applying a moratorium on new exhibition development unless funded by sponsorships or a return on investment is guaranteed;
- postponing building maintenance and repairs until urgently needed;
- stretching the use of equipment beyond its expected life;
- restraining discretionary spending;
- pursuing energy efficiency programs;
- reducing staff; and
- scaling back programs, services and activities offered to the public.

5.2 FINANCIAL PLANNING ASSUMPTIONS AND PROJECTIONS FOR 2014–2015

5.2.1 Parliamentary Appropriations

The parliamentary appropriation amounts included in the five-year corporate plan assumes that the Corporation will continue to receive the existing annual NMST reference levels of \$26.862 million and an additional \$9.842 million over 2014–2015 to 2017–2018 from the Government of Canada for the Canada Science and Technology Museum mold remediation and stabilization plan and substantive cost estimates for the roof replacement and seismic retrofit. There is also a contribution of \$70.715 million over 2015–2016 to 2017–2018 for the museum building roof replacement and seismic retrofit and to modernize the building’s exhibition space and exterior facade.

5.2.2 Revenue Projections

The Corporation expects to supplement the parliamentary appropriations through a number of funding sources including revenues, sponsorships and philanthropic support. After recording significant revenues in 2013–2014 from the presentation of the *Star Wars™ Identities* exhibition at the CASM, revenues were expected to return to their 2012–2013 level in 2014–2015 and remain stable in subsequent years. The closure of the MSTC until re-opening in 2017 will have a significant impact on the revenues garnered by the Corporation. Total earned revenue from all sources for the Corporation was projected at \$6.835 million for 2014–2015. The projected earnings are at \$5.835 million, representing a loss of \$1 million. The Corporation is now projecting a decrease of approximately \$2.3 million for both 2015–2016 and 2016–2017. Revenues from all sources are expected to return to their 2012–2013 level in 2017–2018.

Attendance

Revenue projections are intrinsically linked to museums visitor attendance. Visitors typically pay admission and parking, they participate in a thematic experience at an extra cost, purchase food or beverage, and shop in the boutique. The total visitor target for the budget year 2014–2015 for the 3 museums was 650,000. This target has been adjusted to 515,000, taking into consideration the closure of the CSTM in September 2014 and based on the number of visitors at the other two museums over recent years.

Admissions, Memberships, and Programming

Admission Revenue: The estimated revenue from admissions is based on an expected 515,000 total visitors in budget year 2014–2015, 420,000 of which are expected to be paying visitors at an average admission price of \$5 per visitor. This is aligned with previous years' results at CAFM and CASM, with the exception of 2013–2014, which had a spike in visitors due to the *Star Wars™ Identities* exhibition. It also takes into consideration the closure of CSTM in September 2014.

Membership Revenue: The Corporation's approach is a tiered membership-sales strategy that provides different categories of memberships for families, seniors, students, major donors, and others. Membership privileges include: unlimited admission to the three museums, discount on regularly priced merchandise in the museums' gift shops and cafeterias, early registration to summer camp programs, and invitations to exclusive members-only events and tours.

Until the closure of the CSTM on September 11, 2014, membership sales were on target to reach record levels. The closure will have a significant impact on membership revenue, attendance, and overall member satisfaction until the CSTM reopening in 2017. A revenue projection of \$460,000 in 2014–2015 has been reduced to \$320,000, representing 28% less as a result of the closure.

Education Programming Revenue: Revenue is generated from fees charged for education programs for school groups. Corporation museums carry out educational programs for school ages that range from kindergarten to grade 12 and host generally an average of 1,950 school groups per year. Revenue is also generated from fees charged for summer camps. Taking into consideration the closure of the CSTM until 2017, the Corporation will not be in a position to sustain the level of revenue generated over the last few years. The projection for 2014–2015 of \$620,000 for total educational programming revenue assumes \$200,000 from school programs.

Commercial Operations

Retail Revenue: The museums have on-site (CASM and CSTM) and online boutiques that sell books, toys and games, giftware, apparel, and other branded merchandise related to the subject matter and exhibitions at each museum. Due to the closure of the CSTM in September 2014, the Corporation anticipates a significant decrease in retail sales through 2014–2015 when compared to 2012–2013, for a total projected revenue of \$690,000.

Parking: The maximum charge for parking at all three sites is \$6 per day, and visitors can re-use the parking receipt throughout the day at any of the Corporation's museums. Parking is monitored by a third-party company that is responsible for collecting parking fees and maintaining the machines.

For fiscal year 2013–2014, the Corporation collected \$540,000 in parking revenue. This is higher than predicted due to the popularity of the *Star Wars™ Identities* exhibition at the CASM, which caused a surge in parking revenues. The projected parking revenues for 2014–2015 are \$240,000 based on projected visitor attendance.

Facility Rentals: The calculation of facility rentals revenue uses a fee per event model plus a profit-sharing model with the cafeteria/catering services. It is assumed that the overall number of bookings for all rentable spaces in the Corporation's museums will grow from recent years, yielding a projected revenue of \$265,000 in 2014–2015.

Thematic experiences: A different thematic experience is offered at each museum site, for an additional cost on top of the admission fee. The Corporation expects thematic experiences to yield \$115,000, a decrease from the two previous years due to closure of the CSTM. CAFM and CASM continue to offer popular thematic experiences.

Farm operations: Part of the CAFM includes a working farm that generates revenue through milk production. Revenues from this activity are projected at \$300,000 as they are expected to be comparable to revenues from the previous year, and will remain relatively constant for the planning period.

Other: An amount has been budgeted for revenue from travelling exhibitions, licensing, and copyright that are normally made on a cost-recovery basis. The possible revenue from this source will be investigated further in future years.

Sponsorships and Contributions

The sponsorship target for 2014–2015 is \$550,000, which is feasible given the successful initiatives and programs the Corporation has developed recently, such as the exhibitions *Potash: Feed the World* and *Food Preservation: The Science You Eat* as well as the Let's Talk Energy pan-Canadian project. The NMST will focus on identifying

opportunities to leverage collaborations with federal government departments and agencies, post-secondary and other academic institutions, as well as the private sector, by offering them a public face to communicate their priorities and innovations in the areas of science, technology, engineering, and mathematics (STEM).

The Corporation anticipates a contribution of \$400,000 from the Canada Science and Technology Museums Corporation (CSTM) Foundation in 2014–2015.

Other contributions in this category include in-kind support from employees in other government organizations for which the fair market value can be determined.

Investment Revenues

The short-term cash balance is invested in low risk vehicles (i.e. GICs, Canadian Savings Bonds) with an expected yield of 1.5% contributing \$90,000 in revenue.

5.2.3 Planned Expenditures

Planned expenditures for 2014–2015 and subsequent years take into consideration the CSTM closure.

The Corporation's expenditures are divided according to the four elements of the Program Alignment Architecture. The Corporation established five Key Result Areas (KRAs) that serve as long-term objectives to guide the work of each program.

Sharing Knowledge: \$12,295,000

(KRA 1: Share knowledge through our programs and compelling visitor experiences and KRA 2: National presence, participation and outreach)

Sharing Knowledge includes all activities dedicated to the interpretation of the collection and the demonstration of scientific and technological processes to Canadians. The NMST engages Canadians with the past, present, and future of science, technology, and society through rich and compelling experiences. It also plans to increase its reach to all provinces and territories with a variety of stakeholders involved in science, technology, and culture.

The main investment for these goals will be in programs to interpret the collection and the upkeep of current exhibitions at CASM and CAFM, as well as the implementation of the National Outreach Strategy. New exhibitions will continue to be dependent on partners. The Corporation will continue to make small changes to the museums and maintain the visitor base through enhanced visitor experiences. Initiatives such as Let's Talk Energy and *Food Preservation: The Science You Eat* will continue to work with institutions across the country to help promote science literacy. Sharing knowledge

expenses spiked in 2013–2014 due to the expenses related to the *Star Wars™ Identities* exhibition. For the fiscal year 2014–2015 and the two following fiscal years, Sharing Knowledge expenses are expected to decrease significantly due to the closure of the CSTM.

Heritage Preservation: \$4,300,000

(KRA 3: An internationally renowned collection)

Heritage Preservation includes all corporate activities dedicated to developing and preserving the collection, such as documentation, cataloguing, conservation, historical research, the library, and related services. The NMST aims to enrich the collection and enhance its national and international reputation.

In doing so, work on collection documentation and basic preventative conservation measures will be undertaken. A focus on sharing the collection with museums across Canada will help to alleviate some overcapacity. Borrowing institutions will be required to incur the associated costs—these amounts will be accounted for as agreements are brokered.

Internal Services: \$6,880,000

(KRA 4: Corporate sustainability, and KRA 5: Become an employer of choice)

Internal Services comprises all support activities that involve the stewardship and management of corporation infrastructure, resources, and services. The NMST aims to demonstrate responsible management and governance of financial and other resources, and to attract, develop, support, and retain a highly skilled, dynamic workforce.

This area continues to be studied in an effort to minimize cost and address rising operating costs. Investments in tools to streamline processes and gain longer-term efficiencies such as new Human Resource management system and Digital Asset Management system will be the focus.

Accommodations: \$18,599,000

(KRA 1: Share knowledge through our programs and compelling visitor experiences, KRA 3: An internationally renowned collection, and KRA 4: Corporate sustainability)

Accommodations include all activities that involve the physical environments required to house, protect, and display the collection; the public facilities where hundreds of thousands of onsite visitors are welcomed each year; and office and administration space for staff. The NMST aims to do this by creating nationally recognized destinations for all Canadians, enriching the collection and its reputation and demonstrating responsible fiscal management. Expenditures for the CSTM mold

remediation and stabilization plan and to commission substantive cost estimates for the roof replacement and seismic retrofit are reflected under Accommodations.

Table 2
Statement of Operations – Accrual Basis
(in thousands of \$)

	2012– 2013 Actual	2013– 2014 Actual	2014– 2015 Forecast	2015– 2016 Projection	2016– 2017 Projection	2017– 2018 Projection	2018– 2019 Projection
REVENUE							
Admission							
Science and Technology	\$1,340	\$1,340	\$760	\$0	\$0	\$1,375	\$1,400
Aviation and Space	\$645	\$3,327	\$645	\$650	\$660	\$670	\$680
Agriculture and Food	\$605	\$611	\$610	\$620	\$630	\$640	\$650
Boutique Sales	\$842	\$1,722	\$690	\$535	\$575	\$1,050	\$1,100
Facility Rentals and Concessions	\$213	\$339	\$265	\$265	\$280	\$310	\$325
Parking	\$0	\$540	\$240	\$170	\$175	\$320	\$320
Membership	\$380	\$494	\$320	\$220	\$230	\$420	\$430
Farm Operations	\$275	\$306	\$300	\$315	\$325	\$340	\$350
Thematic Experiences	\$123	\$131	\$115	\$95	\$100	\$125	\$125
Other	\$272	\$460	\$250	\$250	\$250	\$250	\$250
	\$4,695	\$9,270	\$4,195	\$3,120	\$3,225	\$5,500	\$5,630
Contributions	\$2,272	\$3,138	\$1,550	\$1,600	\$1,600	\$1,600	\$1,600
Interest	\$168	\$169	\$90	\$90	\$90	\$90	\$90
Total Revenue	\$7,135	\$12,577	\$5,835	\$4,810	\$4,915	\$7,190	\$7,320
EXPENSES							
Heritage Preservation	\$4,340	\$4,327	\$4,300	\$4,300	\$4,300	\$4,350	\$4,350
Sharing Knowledge	\$12,983	\$16,126	\$12,295	\$10,865	\$10,895	\$12,575	\$12,625
Support Activities	\$7,019	\$7,859	\$6,880	\$6,705	\$6,730	\$7,075	\$7,100
Accommodations	\$11,580	\$14,117	\$18,599	\$15,190	\$12,855	\$12,718	\$12,600
Total Expenses	\$35,922	\$42,429	\$42,074	\$37,060	\$34,780	\$36,718	\$36,675
Net Results of operations before government funding	-\$28,787	-\$29,852	-\$36,239	-\$32,250	-\$29,865	-\$29,528	-\$29,355
Parliamentary Appropriation*	\$31,555	\$29,763	\$35,641	\$32,252	\$29,867	\$29,530	\$29,362
Net earnings (Loss)	\$2,768	-\$89	-\$598	\$2	\$2	\$2	\$7

Notes:

* Appropriation has been reported on an accrual basis, modified from our parliamentary vote as shown in Table 3.

The loss recognized in 2014–2015 in the Statement of Operations is a result of the CSTM closure. The Corporation is using the accumulated unrestricted net assets as of the end of 2012–2013 to finance the operating shortfalls in 2014–2015 and 2013–2014 for roof repairs.

Table 3
Parliamentary Appropriations
(in thousands of \$)

	2012– 2013	2013– 2014	2014– 2015	2015– 2016	2016– 2017	2017– 2018	2018– 2019
	Actual	Actual	Forecast	Projection	Projection	Projection	Projection
Base Appropriations	\$26,491	\$26,862	\$26,862	\$26,862	\$26,862	\$26,862	\$26,862
One-Time Funding	\$5,011	\$141	\$0	\$0	\$0	\$0	\$0
Mold Remediation and Stabilization	\$0	\$0	\$6,279	\$2,890	\$505	\$168	\$0
CSTM Infrastructure Renewal	\$0	\$0	\$0	\$33,410	\$30,216	\$7,000	\$0
Sub-Total Main Estimates	\$31,502	\$27,003	\$33,141	\$63,162	\$57,583	\$34,030	\$26,862
Deferred appropriations used in current year	\$1,514	\$1,813	\$0	\$0	\$0	\$0	\$0
Amount used to purchase capital assets	-\$4,423	-\$2,259	-\$700	-\$34,110	-\$30,916	-\$7,700	-\$700
Amortization of deferred Capital funding	\$2,962	\$3,206	\$3,200	\$3,200	\$3,200	\$3,200	\$3,200
Appropriations reported in Statements	\$31,555	\$29,763	\$35,641	\$32,252	\$29,867	\$29,530	\$29,362

5.3 CAPITAL BUDGET

The Corporation will use a base capital funding of \$700,000 annually from the \$26.862 million received in appropriations. As a result of continued erosion of the Operational Budget from fixed-cost pressures, the Capital Budget was reduced by \$100,000 from the projected \$800,000 total in the 2013–2014 Capital Budget.

5.3.1 Asset Base

The Corporation's total net asset base is \$64.7 million with a large portion being fully depreciated.

5.3.2 Five-Year Capital Plan

Over the next five years, the NMST will complete major capital infrastructure work at the CSTM, as explained below. Other than the one-time infrastructure funding, the Corporation has minimal capital funds remaining, which will be invested in essential maintenance and urgent repairs that will extend the useful life of buildings for more than one year. Table 4 provides the Corporation's five-year capital budget.

**Table 4
NMST Capital Budget**

	2012–2013 Actual	2013–2014 Budget	2013–2014 Actual	2014–2015 Budget	2015–2016 Projection	2016–2017 Projection	2017–2018 Projection	2018–2019 Projection
CSTM Infrastructure renewal	\$0	\$0	\$0	\$0	\$29,355,000	\$32,610,000	\$8,750,000	\$0
CSTM Scheduled Lifecycle Replacement	\$266,000	\$150,000	\$40,000	\$0	\$0	\$25,000	\$25,000	\$25,000
CASM Scheduled Lifecycle Replacement	\$62,000	\$100,000	\$215,000	\$175,000	\$150,000	\$25,000	\$25,000	\$25,000
CAFM Scheduled Lifecycle Replacement	\$3,918,000	\$1,700,000	\$1,540,000	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000
Corporate-wide systems	\$147,000	\$596,000	\$389,000	\$300,000	\$400,000	\$450,000	\$450,000	\$450,000
Tenant Improvements	\$30,000	\$25,000	\$75,000	\$150,000	\$75,000	\$125,000	\$125,000	\$125,000
TOTAL	\$4,423,000	\$2,571,000	\$2,259,000	\$700,000	\$30,055,000	\$33,310,000	\$9,450,000	\$700,000

5.3.3 Major capital projects

On November 17, 2014, the Government of Canada announced one-time NSTM funding totalling \$80.5 million for mold remediation and to repair, renovate, and modernize the CSTM building exterior and exhibition space. This funding was part of infrastructure investments by the federal government to renew and repair heritage and museum sites. The Corporation is implementing a remediation and stabilization plan that will be followed by roof replacement, seismic retrofit of the perimeter walls, modernization of the façade of the museum building, and renovating the museum exhibition space. The entire project will require a temporary museum closure of up to 36 months with reopening expected in fall 2017. The project has been divided into two components.

Component 1 – Base building repairs and façade

The first component of the Infrastructure Renewal Project consists of repairs to the CSTM base building envelope, specifically the roof replacement and the building seismic retrofit, followed by improvements to the external façade. Once the design and specifications are complete, the best course of action for scheduling the activities associated with roof replacement and seismic retrofit will be determined. In 2015–2016,

this work will include removal and disposal of the existing HVAC units according to environmental guidelines and removal and disposal of the existing roofing materials, while adhering to asbestos abatement procedures and bracing the building perimeter walls to prevent torsion during a seismic disturbance.

Working with the selected architect, or Prime Consultant, the Corporation will explore options to revamp the two street facing walls of the CSTM building in 2016–2017.

Component 2 – Exhibition space modernization

The second component will consist of the exhibition space modernization, which will include interior renovations and fit-up, thematic framework development, design and fabrication of new and rejuvenated exhibitions and their installation inside the museum.

Preparatory work for the second component has already begun with internal discussions around governance structure, scope of work for RFPs, schedules, and budget allocations.

The exhibition space modernization will be based on a Concept Master Plan, which will outline the functionality, design, and content of the renewed exhibition space according to its mandated research subject areas. Work in the areas of communications, renewable and non-renewable resources, physical sciences and medicine, and transportation has also begun. The Corporation has also begun informal external consultation with renowned museum experts on museum planning.

The detailed base building and exhibition requirements will be identified in the design phase. Construction of the base building will begin once the roof replacement work is complete in 2016–2017 and will consist of constructing new walls and flooring, painting, electrical, security, IT and other exhibition space fit-ups.

The new CSTM exhibition space will use more digital technologies, more audio-visual components, as well as new and innovative interactives that will be developed with the help of industry professionals.

While the majority of the design and fabrication of the exhibitions will occur in 2016–2017, preliminary design concepts will begin in 2015–2016. The Corporation will be using primarily external museum exhibition design experts.

5.3.4 Corporate-Wide Assets

Corporate assets are primarily operational and consist of equipment, including a fleet of eight vehicles, material handling equipment, information technology assets, furniture and fixtures. As the external environment moves toward greater reliance on information, the Corporation is required to redirect some of its appropriation to this area. The Sharing Knowledge portion of its mandate has changed drastically as well, with external and internal clients expecting increased access to digital information and images. Data servers, increased bandwidth, firewalls, and digital equipment have become a necessity, and will require increased resources. The NMST's total asset value and investment over the last two years has focused on operational efficiencies.

5.3.5 Capital Project Proposals Under Development

There is a need to address upgrades and site improvement to enhance the visitor experience and ensure that the Corporation's capital infrastructure is properly maintained, which would otherwise impede delivery of its mandated activities. For instance, the Corporation has prepared long-term site plans for the CASM and the CAFM. These plans have been approved by the NMST's Board of Trustees and the National Capital Commission. Should additional resources become available after budgetary pressures have been addressed, the Corporation would invest in the capital improvements listed in the table below (in order of priority).

Table 5
Capital Project Proposals Under Development

NMST Capital Project Proposals Under Development
Final fit-up of new Learning Center at CAFM
Ventilation units and sanitation upgrade for Building 2380 (CSTM)
Replacement of heating and cooling equipment at Building 2495 (CSTM)
Fire suppression and stand-by power for Buildings 94 and 95 (CAFM)
Civil work at the CAFM to improve visitor access
Mechanical upgrades for Building 2421 (CSTM)
Link between the museum and the hangar at CASM

5.3.6 Required New Facilities

Collection Storage

Current artefact storage consists of three leased, industrial-grade buildings not deemed suitable for the proper preservation of the NMST collection. The shortcomings of these buildings were raised by the Auditor General in two special studies of the Corporation

in 2004 and 2009. The limited space is currently at 130% capacity, severely limiting the Corporation's ability to make valuable additions to its national collection. Moreover, tenant improvements continue to be required to adapt the facilities.

The Corporation has completed a functional program to accommodate current collection needs with an additional 25 years of growth. Financing options for a new collection facility include design-build, lease-to-own and a public-private partnership, both on current Crown land and alternative locations.

Canada Aviation and Space Museum (CASM)

The CASM consists of two main buildings and two smaller supporting structures. The site, nearly 25 years old, has been updated thanks to funding decisions in 2006 and 2008. The next step for the Corporation will be to resume work on the implementation of its long-term site plan, including a physical connection between the museum and the airplane hangar buildings. The link would encourage visitors to visit the rest of the world-renowned aviation collection housed in the hangar. The Corporation also requires a conservation and restoration facility to provide suitable space so that the collection is preserved for generations to come; such a space is currently not available for restoring aircraft. The CASM will also be involved in coordinating the Rockcliffe Airport building reconstruction, as it forms an integral part of the site plan. While opportunities to advance this plan may be possible with some of the collaborations currently being discussed with industry, any future capital projects at CASM remain unfunded.

Canada Agriculture and Food Museum (CAFM)

The CAFM is located at the Central Experimental Farm (CEF) in Ottawa. The CEF has been designated a national heritage site and provides a perfect setting for the museum. The CAFM occupies five buildings from Agriculture and Agri-Foods Canada (AAFC). The site benefited from a one-time investment of \$4.6 million from the 2008 budget for infrastructure projects. This was part of the long-term site plan for the museum, which was approved by both AAFC and the National Capital Commission. The upgrades include a proper visitor centre, new classrooms and improved exhibition space. The site plan also addresses traffic flow for improved operations and increased visitor safety on the site, the final fit-up of the Learning Center, and civil work to enhance visitor access and safety, including site traffic and parking relocation; all of these remain unfunded.

ANNEX 1 – NMST BOARD OF TRUSTEES

APRIL 12014 – MARCH 31 2015

Board Member	City, Province
Gary Polonsky, Chairperson	Courtice, Ont.
Jim Silye, Vice-Chairperson	Arnprior, Ont.
Marie-Claire Bélanger	Montréal, Que.
Harold F. Bjarnason	Gimli, Man.
Jane Hungerford	Vancouver, B.C.
Helen Johns	Exeter, Ont.
Glenn Schmidt, P.Eng., MBA	Calgary, Alta.
E. Virginia I. McLaughlin	Cobourgh, Ont.
David Cohen	Westmount, Que.
Neil Gary Russon, CMA	Fredericton, N.B.
Margaret Smith	Amherst, N.S.
Dr. David Desjardins	New Maryland, N.B.
Director and CEO	
Alex Benay	

ANNEX 2 – EXHIBITIONS PLANNED FOR 2014–2015

Canada Agriculture and Food Museum

Opening of the new exhibition *Food Preservation: The Science You Eat*.

Small exhibition on war horses as part of the commemoration of the First World War.

Canada Aviation and Space Museum

Complete renewal of the First World War exhibition to commemorate the start of this conflict.

Complete renewal of the early aviation exhibition.

Virtual Exhibition

A complete refresh of the Canadian Women of Innovation website to further engage youth, girls in particular, in the exciting world of science, technology, engineering, and mathematics (STEM).