



We show how science and technology transform the lives of Canadians. We strive to be the main source of information to Canada and the world on the scientific and technological heritage of Canada.

And we make it exciting!

# Contents

Board Members and Committees
Introduction Strategic Issues Operational Priorities Primary Activities
Corporate Profile
Mandate
External Environment
Government and the Heritage Portfolio
Competitive Position
Strategic Issues for the Planning Period  Accommodation
Reaching all Canadians
Primary Activities         2           Heritage Preservation         2           Research         2           The Collection         2           Collection Development         2           Collection Management         2
Sharing Knowledge
Canada Science and Technology Museum
Web Sites
Revenue Generation
Financial Summary 2002–2003 to 2006–2007
Operating Budget Summary 2002–2003
Capital Budget Summary 2002–2003

# Board Members and Committees

(as of March 2002)

### **Board Members**

ChairmanVirender K. HandaVice-ChairmanEric LemieuxMembersOlga Barrat

Gail Beck

Jacques F. Brunelle Faye Dawson-Flynn Ron Foxcroft

Costanzo Gabriele Patti Pacholek Joachim Simard Roger Soloman

## **Executive Committee**

Chairman Virender K. Handa
Members Eric Lemieux

Joachim Simard Christopher Terry

### **Audit Committee**

Chairman Eric Lemieux
Members Gail Beck
Patti Pacholek
Roger Soloman

### **Major Facilities Committee**

Chairman Jacques F. Brunelle

Members Costanzo Gabriele

Virender K. Handa

Joachim Simard

Christopher Terry

### **Marketing Committee**

ChairmanRon FoxcroftMembersOlga Barrat

Faye Dawson-Flynn

### **Development Committee**

ChairpersonGail BeckMembersFaye Dawson-Flynn

Ron Foxcroft

# Canadian Science and Engineering Hall of Fame Committee

ChairpersonOlga BarratMembersCostanzo GabrielePatti Pacholek

"Canada is defined by far more than its political boundaries or economic relationships. In these times of rapid change and globalization, it is more important than ever that we know who we are as Canadians and what brings us together."

"The Government will help Canadians to strengthen their bonds of mutual understanding and respect, to celebrate their achievements and history, and to exercise their shared citizenship."

Speech from the Throne, January 2001

# Introduction

The Canada Science and Technology Museum Corporation, originally the National Museum of Science and Technology, was established as an autonomous Crown corporation on July 1, 1990. As a national institution and member of the Government of Canada's culture and heritage portfolio, the Corporation is responsible for preserving and protecting Canada's scientific and technological heritage and promoting and sharing knowledge about that heritage. The Corporation and its museums tell the stories of Canadian ingenuity and achievement in science and technology, and demonstrate how these accomplishments have contributed to the building of our country.

In its January 2001 Speech from the Throne, the Government of Canada recognized, among other things, that it is important to show Canadians who they are, thus bringing them together as a nation; to celebrate Canada's achievements and history; and to provide access to this heritage. By preserving and celebrating the scientific and technological heritage of Canada, the Corporation can

foster a sense of identity and pride on the part of all Canadians for their achievements in science and technology. With the government's commitment and support of the role played by cultural and heritage institutions, the Corporation views the upcoming planning period as one rich in opportunities for sharing the full sweep of Canada's scientific and technological heritage — and the future that heritage implies — with Canadians, wherever they may live.

The Corporation is the only comprehensive science and technology collecting institution in Canada, and focuses on the following major subject areas: aviation, communications, manufacturing, natural resources, renewable resources including agriculture, scientific instrumentation, and transportation. The Corporation operates three museums: the Canada Science and Technology Museum, the Canada Aviation Museum and the Canada Agriculture Museum. A Board of Trustees, whose members come from all regions of the country and are appointed by the Governor-in-Council, oversees the management of the business, activities and affairs of the Corporation, while the Corporation's daily operations are managed by a President and Chief Executive Officer.

"The national capital, with its cultural institutions, is a symbol of our Canadian values, culture and heritage. The primary goal of this plan, developed by the Government of Canada, is to make our national capital a source of pride for all Canadians well into the 21st century."

Sheila Copps, Minister of Canadian Heritage, May 15, 2001



## **Strategic Issues**

The Board of Trustees of the Canada Science and Technology Museum Corporation has identified three strategic issues as priorities for the upcoming planning period:

- · construction of a collection storage hanger at the Canada Aviation Museum:
- defining the needs for a new Canada Science and Technology Museum building; and
- increasing accessibility to Canada's scientific and technological heritage.

The Board was very encouraged by the Government of Canada's response to the Corporation's longstanding accommodation problems — in particular, funding announced for the construction of a collection storage hangar at the Canada Aviation Museum. The storage hangar construction project and the definition of needs for a new science and technology museum building will be a primary focus for the Board and staff of the Corporation over the planning period.

The Board views universal accessibility to Canada's scientific and technological heritage as a key ingredient in the fulfilment of the Corporation's mandate. Through its exhibitions, innovative programming, Web sites and publications, the Corporation will seek to increase accessibility and awareness of this scientific and technological heritage among all Canadians.

### **Canada Aviation Museum Hangar**

On May 15, 2001, the Government of Canada announced its plan for investing in Canada's capital and its federal cultural institutions. As part of that announcement, the Government addressed the Corporation's longstanding artifact preservation problem by providing funding for the construction of a collection storage hangar at the Canada Aviation Museum. This decision reflects an appreciation of the profound national and international significance of the Museum's collection, and the unacceptable risk posed to the survival of those aircraft which had to be stored outside for many years because of their size and lack of proper accommodation. Construction of the storage hangar is scheduled to begin in Spring 2003.

## **New Canada Science and Technology** Museum Building

The Government's announcement also recognized the Corporation's other major accommodation problem: that of the Canada Science and Technology Museum, which is currently located in a 40-year-old warehouse-grade building in an industrial park on St. Laurent Boulevard. The Corporation will proceed with a feasibility study on a new facility for the Museum, with a view to defining the needs and costs, as well as criteria for siting of a new building. The study is expected to be completed by late Fall 2002

### **Reaching All Canadians**

As a national institution, the Corporation strives to make its collection and programs accessible to all Canadians. The Corporation has worked, and will continue to work, with other institutions and industry partners to maximize its use of resources, and to develop mutually beneficial results, adopting the leadership role expected of a national institution. This past year marked a watershed for the Canada Science and Technology Museum Corporation and its three constituent museums: for the first time in our history, virtual visitors outnumbered those who visited our museum sites. This trend lends new impetus to our efforts to examine the many ways in which we can marry this new strategic opportunity with those of our partners in the museum and heritage portfolio communities, and with other stakeholders, in order to maximize our ability to share our collections and research with audiences around the world.

"In a globalized society, in a universe of hundreds of channels, in the age of the Internet, it is more important than ever to support Canadian culture."

Prime Minister Jean Chretien, January 31, 2001



The Corporation will explore the idea of developing an Affiliate Museum Program as an innovative approach to extending the Corporation's outreach on a national basis. This program could enable Canadians to experience a facet of the Corporation's museums through regional museums, and would also enable smaller institutions to showcase themselves on a national stage. However, it is apparent that many local museums would require financial and other assistance in order to participate fully. A pilot project will be proposed, enabling the program to be evaluated over a three-year period, using standards and performance indicators based on those used by the Corporation.

In order to provide sufficient resources to help the Corporation respond to new opportunities, while continuing to fulfil its mandated activities, the Corporation will seek increased operational funding from the Government of Canada. Identified areas for which funding will be sought include: new government initiatives on digitization of cultural assets, the Internet and national outreach; public demand for new and expanded services, and growth in existing activities.

## **Operational Priorities**

During the upcoming planning period, the Corporation will focus on strengthening its efforts in key areas of activity. The Corporation will continue to:

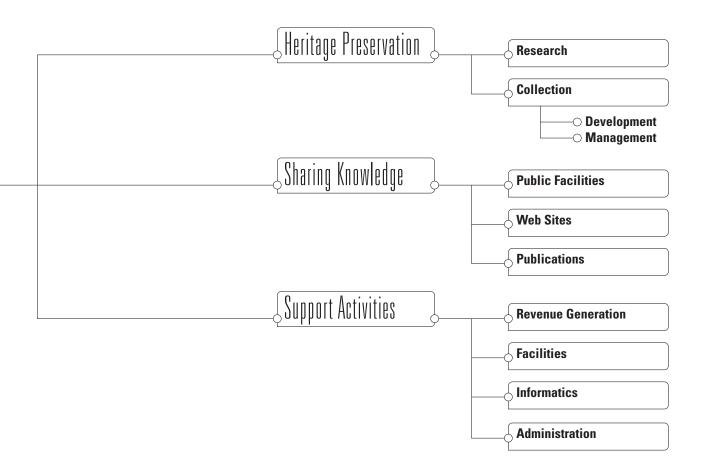
- provide for the preservation and protection of the collection:
- make its knowledge base available to a broad audience using electronic media;
- ensure a systematic renewal of its exhibitions, and the development of innovative programming to maintain its audience base;
- review its collection to ensure its high quality and relevance:
- build its knowledge base and collections in major subject areas, and
- secure strategic partnerships in support of its objectives.

# **Primary Activities**

The Canada Science and Technology Museum
Corporation is in the business of preserving
Canada's scientific and technological heritage and
sharing knowledge of that heritage. Three groups
of activities are carried out in support of the
Corporation's mandate:

# Corporate Mandate

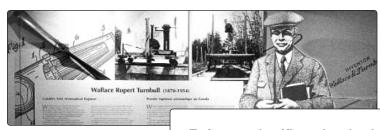




# Heritage Preservation a) Research Objective To identify concepts and ideas key to the understanding and appreciation of the scientific and technological heritage of Canada. Corporate Mandate b) Collection Objective To develop and manage a representative collection. Sharing Knowledge a) Public Facilities Objective To provide an enriching museum experience to a broad public audience. b) Web Sites Objective To make the Corporation's knowledge base available to a national and international audience, by developing a strong Web presence. c) Publications Objective To make the Corporation's knowledge base available to a national and international audience. Support Activities a) Revenue Generation Objective To increase the financial resources available to the Corporation for the fulfilment of its mandate. b) Facilities Objective To provide quality venues for public programming activities and protection of the collection, and to promote operational effectiveness. c) Informatics Objective To provide for the fulfilment of the Corporation's public role in enabling national and international audiences to access a network which meets security and network standards, as well as to facilitate its internal business practices. d) Administration Objective To provide effective and efficient services within a framework of appropriate management control.

### **Strategies**

- Identify and analyze, guided by the "Transformation of Canada" theme, the important concepts, ideas, objects and issues key to the historical development of each of the major subject areas, in order to build the knowledge base on the scientific and technological heritage of Canada.
- Complete historical research to guide collection development and provide basic information for exhibitions, interpretative programming and Web presentations.
- Identify and acquire objects and supporting documentation that best reflect a historical framework, and deaccession materials that are not consistent with this
  framework.
- Provide intellectual access to the collection by managing all documentation in a professional manner that permits retrieval and adaptation to a variety of dissemination media.
- Maintain proper records for each collection item from three perspectives: location and current museum use, history of the item and its condition.
- Provide physical access to the collection by showcasing artifacts in exhibitions and operating an active loan program.
- Develop exhibitions and programs guided by the "Transformation of Canada" theme.
- Maintain a plan for the systematic renewal of exhibitions.
- Monitor and evaluate the Museums' audiences and museum visitor experiences, in order to make informed decisions.
- Promote the Corporation's museums and services.
- Provide the public with direct access to the collection and research holdings.
- Offer new products which take advantage of the unique properties of the Internet as a communications medium.
- 5 Provide a range of materials to serve both a general and specialized audience (printed material will also be made available in electronic format as appropriate).
- · Seek opportunities for revenue generation through cost recoveries, commercial endeavours and corporate development activities.
- Ensure that all revenue generating initiatives are within the parameters and spirit of the mandate.
- Ensure that the costs of generating revenues do not exceed the revenues generated.
- Maintain a long-term accommodation plan to ensure the effective use of all facilities.
- Ensure that incremental decisions relating to the museum sites are in accordance with approved site development plans.
- Conduct a regular program of building inspections to provide for timely maintenance and adherence to applicable building and safety codes.
- Provide appropriate networking tools to enable direct access to collections and research holdings, while meeting existing and future business practices.
- Provide effective, efficient and secure informatics support services for the Corporation, within a framework of appropriate document management control.
- Seek and develop opportunities by working and establishing strategic relationships with appropriate partners and providers.
- Establish a balance between the quality of the service provided and its cost.
- Ensure that the Corporation operates effectively, efficiently and economically, in accordance with legislative requirements, sound business practices and ethical management standards.



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.

Mandate of the Canada Science and Technology Museum Corporation

# Corporate Profile

### **Mandate**

The mandate of the Canada Science and Technology Museum Corporation, as stated in the Museums Act is:

> 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.

The Canada Science and Technology Museum Corporation was established as an autonomous Crown corporation on July 1, 1990, with the passage of the Act. It is directed by a Board of Trustees, the members of which are appointed by the Governor-in-Council, from all regions of the country. The Board has up to eleven members, including the Chair and Vice-Chair, and is supported by six committees: an Executive Committee, an Audit Committee, a Marketing Committee, a Canadian Science and Engineering Hall of Fame Committee, a Major Facilities

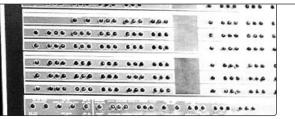
Committee and a Development Committee. The Corporation's daily operations are managed by the President and Chief Executive Officer, with support from a management team which includes the three museum Directors General, and Executive Directors of Museum Services, Finance & Administration, Human Resources, Corporate Development, Corporate Planning and Major Capital Projects. The Corporation receives an annual appropriation which it supplements through revenue generating activities.

The Corporation is responsible for the development and management of a representative collection of scientific and technological artifacts and materials. The collection focusses on seven major subject areas: aviation, communications, manufacturing, natural resources, renewable resources, scientific instrumentation, and transportation. The Corporation manages three museums: the Canada Science and Technology Museum, the Canada Aviation Museum and the Canada Agriculture Museum. Each museum sets its own public programming activities and strategies in recognition of the different markets and clientele it serves. The museums operate under a common set of corporate policies. Support services such as human resources, finance and facilities management are provided centrally.



To discover and share knowledge about Canada's scientific and technological heritage, in order to increase an understanding and appreciation of the role that science and technology have played and continue to play in the transformation of Canada.

Mission of the Canada Science and Technology Museum Corporation



The Corporation's workforce consists of 240 full-time-equivalent positions. Contracted services are used where they are most cost-effective. The Corporation also benefits from the contributions of dedicated volunteers who assist in a wide range of activities. The Corporation is housed in a network of buildings located at three sites in Ottawa: Lancaster Road, Rockcliffe Airport and the Central Experimental Farm. These sites provide office, artifact storage, exhibition and programming space.

### Mission

The Canada Science and Technology Museum Corporation has adopted the following mission statement to guide its activities:

> To discover and share knowledge about Canada's scientific and technological heritage, in order to increase an understanding and appreciation of the role that science and technology have played and continue to play in the transformation of Canada.

By preserving and celebrating the scientific and technological heritage of Canada, the Corporation can foster a sense of identity and pride among all Canadians for their achievements in science and technology.

# Canada Science and Technology Museum Corporation

**Board of Trustees** 

**President and Chief Executive Officer** 

Corporate Secretary and Executive Director, Corporate Planning

Executive Director, Finance, Administration and Facilities

Executive Director, **Human Resources** 

Executive Director, Major Capital Projects Executive Director, Corporate Development

Executive Director. Museum Services

Director General. Canada Science and Technology Museum

Director General. Canada Aviation Museum

Director General, Canada Agriculture Museum



# External Environment

The tragic events of September 11, 2001 have had, and will likely continue to have, a significant impact on the environment within which the Corporation operates. Government priorities have necessarily shifted, certainly in the short term, to address this heightened global concern. The full extent of the terrorist attack and its duration remains to be fully comprehended; as a consequence, it is difficult to determine the longterm effects on such areas as the economy, travel and tourism.

## **Government and the Heritage Portfolio**

The traditional Canadian values of cultural diversity, inclusion and equality, and what it means to be Canadian, take on heightened relevance in light of recent events. As a national institution and member of the Government of Canada's culture and heritage portfolio, the Corporation, along with other Crown corporations and agencies, plays a key role in promoting and sharing knowledge about Canada's cultural heritage. The Corporation and its museums tell the stories of Canadian ingenuity and achieve-

ment in science and technology, and demonstrate how these accomplishments have contributed to the building of Canada. Through its exhibitions, innovative programming, publications and Web sites, the Corporation highlights Canadian accomplishments and innovations in science and technology, and strives to engage Canadians and the world in active learning about this scientific and technological heritage. The Corporation works closely with other agencies within the portfolio to improve communication, share knowledge, and to identify and resolve mutual issues

## The Economy

Before September 11, the global economy was already slowing at a quicker pace than forecasters had predicted. Only twelve months earlier, the Canadian economy was growing in most sectors a trend which was expected to continue over the next few years. Today's reality is that the economy is in a slowdown, particularly in the technology sector. The events of September 11 will likely weaken it further, at least in the short term. That said, economic fundamentals such as low inflation and lower tax rates are strong and suggest that, over the medium term, prospects for the economy are encouraging.

### Fiscal Renewal

Over the past decade, the Corporation's core funding has been reduced by 5%, primarily due to the Government of Canada's expenditure reduction program of the mid-1990s. No additional reductions have occurred in recent years, as the government's fiscal position has strengthened.

Capital funding has been received or approved for urgent roof reinforcement at the Canada Science and Technology Museum and roof membrane replacement at the Canada Aviation Museum. Funding has also been approved for a new office building and a new collection storage hangar at the Canada Aviation Museum, and for some muchneeded scientific and artifact-handling equipment.

The Corporation has endeavoured to increase its financial resources through various revenue generation initiatives, including gift shop and publication sales, admission fees, food services, program fees, membership sales, sponsorship, fundraising, simulator experiences and facility rentals. While gross revenues have generally increased from year to year, it must be remembered that most revenue generation requires expenditures, and the resulting



net revenues do not greatly increase the Corporation's resources. It must be noted, however, that many of these amenities are, like Web sites, a means of reaching people and satisfying some of the other reasons for which they visit. The more enjoyable their visit, the more apt they are to both return and encourage others to visit.

### **Our Visitors**

Gradual changes in Canadian demographics continue to affect attendance at our museums especially at the Canada Science and Technology Museum, which has a large target audience of local families with children under 15. On a corporate basis, 80% of non-school visitors come in family or family/friend groups. Changes in this segment affect even the non-local audience, brought in as visiting friends and relatives by local families. Census data show that Canada's population is ageing, as the baby boomers approach senior status. Indeed, the number of seniors has more than doubled in the past 25 years. Museum visiting, usually seen as a family activity, has declined slightly but significantly across Canada since the mid-1990s. This, despite an increase in the number of museums.

At the other end of the scale, across Canada the number of children under 15 has been falling slowly but surely (20.5% in 1994, 19.4% in 1999,

17.9% estimated in 2004). Although there are regions in which the under-15 population has been growing, the region that our museums draw upon most, the Ottawa metropolitan area, has seen a decline in the number of children. In the larger National Capital Region, 20.2% of the population is under 15. In the smaller area historically known as the City of Ottawa it is 16.4%. The closing of schools in Ottawa, and the proliferation of portable classrooms in Kanata, is a visible reminder that our region is undergoing major demographic, political and economic changes.

## **Competitive Position**

The Corporation has both competitive advantages and disadvantages, all of which must be exploited, or compensated for, in the quest for audiences. Its strengths clearly include the richness of the collection, and the knowledge base that is developed from the study and research of a national collection. The aviation collection is one of the best of its kind in the world, and the quality of the Canada Aviation Museum's restoration work is acknowledged internationally. It also houses the nation's

most extensive aviation library. The collection of the Canada Science and Technology Museum is recognized for its comprehensive depiction of Canadian achievements and innovations in science and technology. The communications and transportation collections are particularly noteworthy in this respect. In addition, the Corporation has developed an understanding of the potential inherent in the Internet, as well as expertise in the development of applications which exploit those possibilities.

From the standpoint of actual visitors to cultural and heritage institutions, the Ottawa-Gatineau metropolitan region is one of the most competitive environments in Canada. Apart from professional sports teams, a host of urban and rural recreational possibilities (and the national seat of government), there are eight major museum/gallery institutions. In addition, the establishment of commercial entertainment centres such as multi-service movie complexes has increased competition for local audiences.

In such a competitive market, understanding the audience, creating top-of-mind awareness, and building a credible, coherent image are key. The Corporation's museums have been most effective in reaching their respective target audiences. The Canada Science and Technology Museum is well



known for its interactive displays, its hands-on approach, and as a highly-valued environment for educational purposes. The Canada Aviation Museum has developed a reputation as a leader in innovative educational and community programming, and as a major venue for national celebrations. The Canada Agriculture Museum benefits from the strong popular appeal of a "farm in the city", and has become a popular attraction for local residents.

The Corporation's competitive disadvantages in this market stem from the nature of many of its facilities, and their physical location outside the downtown core. The Corporation's museum buildings also lack the full range of amenities appropriate to their function, and this has limited opportunities to generate revenue through such activities as facility rentals and sponsorship. Despite these limitations, the Corporation's three museum sites are currently maintaining projected attendance results — a very positive endorsement of the exhibitions

and programming offered by the museums. The Corporation attracts approximately 25% of museum visitors in the National Capital Region, while receiving the smallest budget allocation of the four national museum corporations: 17% of the total provided annually.

The marketplace for virtual products has different dynamics. There are no constraints other than the Corporation's ability to create, post and ensure access to virtual or electronic applications on its Web sites. In this respect, the Corporation has a good headstart, having developed an early appreciation of the benefits of partnerships, coupled with experience in the development of applications such as the Silver Dart electronic encyclopaedia which have attracted widespread use.

The Corporation has been able to capitalize on its vast and unique asset base, to which it has added its research skills to create additional value for its audiences through electronic products. There is every indication that the demand for such applications — especially those embodying Canadian content — is likely to increase as popular use of the Internet increases both in Canada and abroad.

It has also become clear that there are no other Canadian institutions working in the same field with the collection or curatorial strengths deployed by the Corporation, giving the Corporation a competitive advantage in the development of applications explaining the evolution of technology in a Canadian context. Conversely, the demand for these new products exerts pressure on the Corporation to allocate resources to this activity, while maintaining its ongoing investment in the physical museum sites. Adequately meeting requirements in both areas will be difficult, given current overall resource levels.



# Strategic Issues for the Planning Period

### **Accomodation**

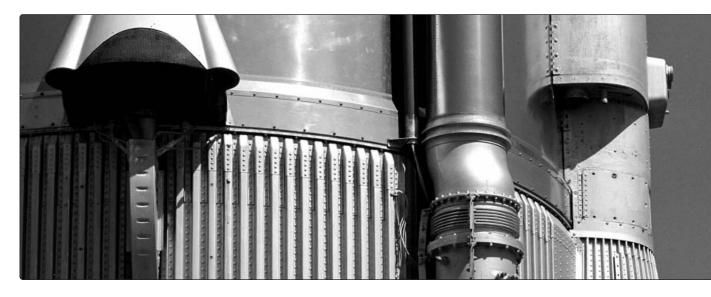
### Canada Aviation Museum

On May 15, 2001, the Minister of Canadian Heritage announced that funding would be provided to construct a collection storage hangar at the Museum's Rockcliffe site, to address a long-standing conservation issue related to aircraft which had previously been stored outdoors. The new storage hangar is to be situated to the east of the current structure. It will accommodate the seven aircraft stored outdoors, those stored in the existing Museum, all aircraft that the Museum anticipates acquiring over the next 10 to 15 years, and any aircraft returning from loans to other museums. This storage hangar is part of a second phase of construction foreseen in the 1992 site development plan for the Museum.

In 2000–2001, the Corporation had received funding for construction of an administration building at the Canada Aviation Museum, to replace temporary office trailers which were nearing the end of their lifecycle. Following a review of this project within the context of the larger storage hangar, it was determined that it was more economical and operationally efficient to combine this project with the hangar project.

The Corporation has prepared a functional program to outline its accommodation requirements for the new hangar, and to define the environmental controls required to regulate temperature and humidity levels, air quality and lighting, in order to meet the long-term preservation needs of the aviation collection. Advantage was taken of the functional program exercise to define the needs of other building components which would optimize this part of the site development plan. These include a visitor services entrance, an overhead pedestrian link connecting the new facility to the Museum, small artifact storage, and a conservation shop.

Architectural and engineering services for the design and construction of the new hangar were obtained through a competitive selection process. A public solicitation for Expression of Interest was followed by a detailed Request for Proposal process. The Corporation formed its team of professionals from the highest-rated firms in each



discipline, and negotiated a contract with the firm ranking highest in each. The successful architectural firm acts as the coordinating consultant for all other team members. A public announcement outlining the results of the competitive selection process will be made in May 2002.

The chosen team of professional consultants will develop a conceptual design, in accordance with the requirements outlined in the functional program. As the National Capital Commission has jurisdiction over the appearance of all federal sites and buildings in the National Capital Region, a presentation of the conceptual design will be made to their Advisory Committee on Planning, Design and Realty. As development of the design proceeds, additional reviews with National Capital Commission staff will be conducted to ensure consistency with the Advisory Committee's approval.

Working drawings and specifications will be prepared by the professional team to properly detail the conceptual design, and to provide the documents to be used in public tender packages. Regular reviews of the working drawings and specifications will be undertaken to ensure that the requirements outlined in the functional program will be respected in the selection of materials and systems for the storage hangar.

The Corporation will use the fast-track construction method to complete the project as quickly as possible. As soon as the working drawings and specifications are completed, they will form the basis for tender documents used in the selection of contractors through the public tender process. The selected contractors will construct the building in accordance with the work described in these tender documents. Our professional team will provide inspection services during construction to ensure that all work is implemented in accordance with the tender documents.

All building systems will be systematically commissioned during and immediately following the construction process. Commissioning ensures that all systems operate in conformity with the design intent, and in conformity with the requirements outlined in the functional program. It also establishes the facility's operations and maintenance program, as well as a preventative maintenance program for the ongoing management of the property.

The first major activity in the new hangar will be the refinishing of an Avro Lancaster bomber. The aircraft, which is currently housed in the Museum building, will be cleaned and repainted with its correct markings before being returned to the Museum for display. Following this, the portion of the collection to be housed in the new building will be installed. The inauguration of the new collection storage hangar is scheduled to take place in December 2003. The major steps for this project over the planning period are outlined below:

### Finalize and announce consultant selection 2002-05-10

Conceptual design completed 2002-07-01

**Drawings and specifications completed** 2002-09-30

**Public tenders completed** 2002-10-18

**Construction contract award** 2002-10-28

**Completion of construction** 2003-12-01

Inauguration 2003-12-08



# Canada Science and Technology Museum

The Museum has been situated at its present location - a site on St. Laurent Boulevard in an industrial park — since 1967. The original building was constructed in 1964 as a bakery, and is thus a warehouse-grade building, now over 35 years old. The site and building have been gradually adapted to museum use over the years, but as the situation was meant to be temporary, investments have been more to ensure the safety and structural integrity of the building, rather than to maximize museological amenities and programming. In 1998-1999, a Property Condition Assessment study, commissioned by the Corporation, identified a potential seismic hazard to the building, in the event of an earthquake within the upper range which can be expected in the National Capital Region. The same study recommended other capital improvements totalling \$1.7 million over the next five years, to bring the building to a reasonable standard of safety and environmental control.

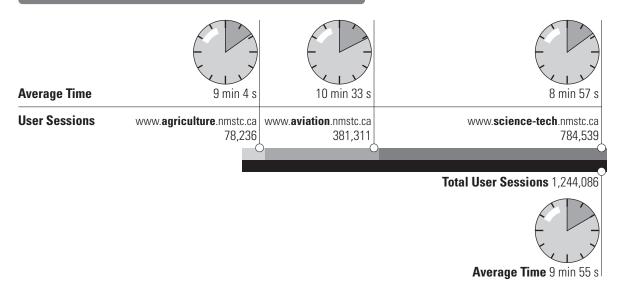
On May 15, 2001, the Government of Canada recognized the Corporation's present situation relative to the Canada Science and Technology Museum building, and announced that a feasibility study would be undertaken, with a view to defining the

needs and costs of a new building, as well as criteria for siting the building. Accordingly, the Corporation will engage consultants to assist it in exercising due diligence in providing the Visioning, Feasibility and Functional studies as described below. The results of these studies will be key to an objective determination of the significant parameters required in selecting the best site for the signature building(s) of Canada's national science and technology museum. The visioning study, which is scheduled for completion by Fall 2002, will provide for in-depth information and refined thinking, including consideration of a new vision for the museum and how large a public it could serve in future.

The overall objective is to study the feasibility of constructing a proper purpose-built museum building or buildings to showcase Canadian science and technology through exhibitions, programs and events; to increase the percentage of the collection available to the public, and to determine the most critical siting parameters, while taking all variables into consideration. The larger goal is to build a lasting legacy to showcase Canada's contributions to science and technology, both within Canada and around the world.

This three-part process will help to define a new Canada Science and Technology Museum, to be located in Canada's capital city. The Corporation will engage one firm to provide each of the three separate and contiguous studies. The Visioning, Feasibility and Functional studies are to be structured as per established Terms of Reference. In general, they are directed at undertaking interactive exercises with staff to determine a vision and possible parameters for the Museum, and to assist in soliciting input from leaders in various communities to determine trends, informal science education needs, and the key characteristics of a successful location and associated programming. A market analysis will be needed to define the existing and potential users of the Museum, relative to different physical locations and program offerings. Studies will take demographics and programming variables into consideration, questions of required size, as well as projected growth, range and program emphasis; e.g., broad period and/or technology-specific exhibitions, children's areas, more interactive exhibitions directed at understanding scientific methods and axioms, the types of spaces required and so forth. Commercial opportunities, rental facilities, evening access for dining, entertainment or a multimedia auditorium/theatre will also be reviewed. Collection facilities and

# Web Site Visitors — 2000



opportunities to demonstrate the collection have profound implications, and could also significantly affect attendance. This will have to be addressed in respect to an open or closed collection and, if open, a determination will have to be made on what percentage of the collection should be accessible. The visioning exercise will include preselected internal museum staff and selected external individuals engaged by the Corporation. The consultant will be expected to facilitate a number of meetings with internal and external stakeholders. Based on this exercise, the consultant will write a clear statement of project purpose and a vision statement which will identify what the Museum should be.

The community consultation process may also require visits to selected museums, perhaps done in clusters selected for their relevance, comparability, and lessons to be learned. Other sectors to be consulted include the museum/science centre. technical, heritage and tourism communities.

A market analysis and strategy will also be required to determine the existing and potential users of the Museum. This could include conducting visitor surveys and evaluations; analyzing demographic and behavioural data, including visitor

accessibility; drawing profiles of existing and potential markets; analyzing market segments; considering the potential impact of existing and projected traffic-flow requirements; proposing a marketing position, and projecting attendance, sales and revenues against location (e.g., inner urban core, outer urban core, extreme outer core, gateway) and quality/size of the facility.

The feasibility study could involve a collection analysis and strategy to project space and facilities requirements for future collections, and a public program plan to project space and facilities requirements for public use of the Museum. The objective is to determine the feasibility of the proposed development, including alternative solutions (e.g., lease, buy, design-build, mixed-use, relocate, renovate, site options).

A functional study will be undertaken following the visioning and feasibility studies, to clearly define and describe the Museum's requirements in context, including development of a unit cost plan, preparation of a preliminary implementation plan, a projected construction schedule, and submission of a draft budget statement. All three studies should be completed by Spring 2003.

## **Reaching All Canadians**

The Corporation endeavours to foster, among all Canadians, an understanding of their scientific and technological heritage and a sense of national pride. As a national institution, the Corporation strives through its exhibitions, programming, Web sites and publications to increase accessibility to, and awareness of, this knowledge base. Traditionally, outreach activities have proven costly, primarily due to the constraints of distance, population dispersal, and timezones. Consequently, any activity contributing to this important initiative must be considered in terms of its ability to maximize exposure in a cost-effective manner.

Activities aimed at increasing accessibility for Canadians to the national collection and programs include the following:

**The Internet** — Dramatic growth in public use of the Internet offers the Corporation an exciting opportunity to facilitate access to its products. Over the past two years, the Corporation and its three museums have noted that virtual visitors now outnumber onsite visitors. It is anticipated that the number of visitors to the Corporation's Web sites will continue to increase, lending impetus to efforts aimed at capitalizing on a clear public interest in the Corporation's offerings. The Corporation will also look at the many ways in which it can marry

# Artifact Loans Distribution

National	Number
Alberta	12
British Columbia	9
Manitoba	5
Newfoundland	1
Nova Scotia	10
New Brunswick	20
Northwest Territories	3
Ontario	239
Prince Edward Island	1
Quebec	160
Yukon	1
Total	461

International	Number
<del>_</del>	
Great Britain	7
Japan	5
New Zealand	2
United States	6
Total	20

this new strategic opportunity with federal initiatives aimed at connecting all Canadians to their heritage online.

Electronic products offer unparalleled access to the Museums' collections and resources to a much wider segment of people in Canada. Increased emphasis will be placed on the development and enhancement of products for the Web sites, and content for networks like Schoolnet. **Museums** — The Corporation's three museums continue to be a primary means of making its collection and programs accessible to Canadians. Some 750,000 visits are recorded annually, with 50% of these from people living outside the metropolitan Ottawa-Gatineau region. This level of visitation is expected to remain stable over the planning period, although the impact on travel and tourism of the tragic events on September 11 is not yet fully known.

Affiliate Museums — As a means of extending its outreach program, the Corporation is reviewing an innovative program whereby other museums could apply to be affiliated with the Corporation. This would not only allow Canadians to experience a part of the Corporation's museums through their local museums, but it would also enable smaller institutions to showcase themselves at a national

level. However, it is apparent that many local museums would require assistance (primarily financial) in order to participate fully in such a program. As a means of testing a program of this nature, a pilot project and associated funding will be proposed, enabling the program to be evaluated over a threeyear period, using standards and performance indicators based on those used by the Corporation for its own programming.

National Artifact Collection — The Corporation is currently working on the development of a "national artifact collection" concept as part of its collection development process. Collection assessment work in all of the major subject areas will result in descriptions of ideal artifact collections for each of the Corporation's major subject areas. From this process, a detailed list comprising the "national artifact collection" for each major subject area — as defined by the research standards adopted by the Corporation — will be created. It is the Corporation's intention that a search will then be conducted to locate the best example of each artifact on the ideal collection list, whether held by the Corporation or another Canadian public museum. If the best examples of an artifact are identified as existing in a publicly-owned museum collection other than the Corporation, discussions will be undertaken with that museum to cooperate in ways which will recognize the artifact as being

of "national significance". In the coming year, subject areas will be considered to test the selection process and to refine the overall approach to be used in connection with such "partner" museums.

Artifact Loans — The richness of the Corporation's collection is one of its significant strengths. In order to increase access to its artifacts, the Corporation will maintain an active loan program of artifacts — including individual artifacts as well as portions of collections — to institutions throughout Canada, the United States and abroad, so that Canadians can experience firsthand what has been preserved on their behalf. Last year, approximately 1.4 million visitors saw artifacts on loan in the various borrowing institutions.

Documentation outlining the history of each artifact and its relevance will be provided with each loan. Artifacts will also be clearly identified as coming from the Corporation's museums.

Collection Information — Information on the

collection will be offered to Canadians through various means of dissemination. Publications on the artifacts in the collection — e.g., *Transformation* series, *Collection Profiles* — will be provided to the general public in both written and, where possible, in electronic format.



Electronic access to information on the collection is also possible through the Museums' Web sites and, based on initial demand, will likely increase over the planning period. Ninety-five per cent of the collection is currently digitized and will be made available on the Web sites as soon as all systems are in place. The Canada Aviation Museum has a significant portion of its photographic collection available on its Web site, and will continue efforts to increase this number. The Canadian National Railway Company's historical photographic collection — containing more than one million images, dating back as far as the 1850s - was transferred to the Canada Science and Technology Museum in May 2000. A virtual photo gallery, CN Images of Canada, was created on the Museum's Web site, and the number of photos available on the Web site will be increased each year over the planning period. The virtual Gallery had close to 50,000 visits during its first year alone. The Museum has also collaborated on *Images* Canada, a partnership with a consortium of several other Canadian cultural institutions, which provides an additional electronic gateway to the rich heritage photographic resources related to science and technology, which are held by the Canada Science and Technology Museum.

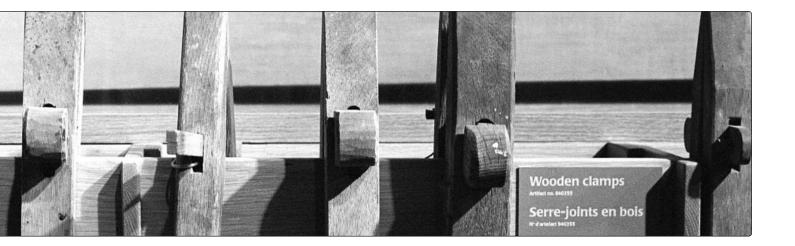
**Partnerships** — The Corporation has initiated a number of partnerships in the recent past, and anticipates these developing into effective working relationships. Two Memoranda of Understanding - one with the National Research Council of Canada and the other with the Canadian Space Agency — were initiated in 2000–2001, and are now in the draft stage. It is fully expected that these will proceed to agreements which will result in further preservation of artifacts associated with each of the agencies, programming benefits for the public, and a greater focus on the great scientific and technological contributions being made by Canadians.

The Corporation is also working with the Canadian Museum of Civilization (Gatineau). Ontario Science Centre (Toronto), Science World (Vancouver), the Centre des sciences de Montreal (Montreal), La Cité (Paris) and the Department of Foreign Affairs and International Trade, to create and open a large-scale exhibition, currently entitled Canada and Modernity, at La Cité in Paris from November 2003 to April 2004. Programming will be extensive during the exhibition, for three months

leading up to the official opening, and after the exhibition closes. Exhibitions and programs, on a smaller scale, are expected to open simultaneously at partner institutions.

The Canada Science and Technology Museum, through its association with the International Committee of Museums of Science and Technology, is cooperating with a number of member institutions to create a travelling exhibition currently called Instruments of Discovery. Focussed on the process of discovery, the exhibition will highlight the use of various tools or instruments - many of which are guite striking — and the role they, and the person who uses them, have played in shaping how we see the world.

The Canada Aviation Museum has a fiveyear sponsorship agreement with the Canadian Warplane Heritage Museum, whereby the Aviation Museum became a presenting sponsor. The agreement provides the Aviation Museum with a wide range of recognition and facility usage rights, as well as a specified quantity of flying services at locations to be nominated by the Canada Aviation Museum. This arrangement provides the Aviation Museum with exposure in a major metropolitan market it could not otherwise reach.



**Travelling Exhibitions** — Traditionally, the travelling exhibitions program has been a primary component of the Corporation's outreach activities, with as many as a dozen exhibitions presented at museums across Canada. However, many of these exhibitions are at the end of their lifecycles and have been retired from circulation. Taking into account the high demand across the country for small travelling exhibitions with interactive components, new small exhibitions are being designed for travel. These exhibitions are first presented at the Corporation's museums, both to test them and to offer new products to our local visitors. They are subsequently sent across Canada to provide Canadians with an opportunity to experience our museum products. Opportunities for partnerships are also explored, as an additional means of producing travelling exhibitions in a costeffective manner.

**Promotional Activities** — The Corporation will continue to promote its museums as destinations for Canadians outside the National Capital Region. Promotional material such as small public displays, public service announcements, brochures, kits and magazine articles will be produced and distributed to increase awareness of the museums. Reaching broader audiences in the most cost-effective manner, and involving various community sectors, has led to increased partnerships and collaborative efforts. This will continue to hold true in the area of media partnerships and collaborative promotional efforts among the Corporation's three museums, other federal partners, and the private sector.

To identify concepts and ideas key to the understanding and appreciation of the scientific and technological heritage of Canada.

Research Objective

# Primary Activities



#### Research

Research comprises those activities which contribute to the building of a knowledge base about the scientific and technological heritage of Canada. The Corporation has identified seven major subject areas on which it will focus its research activities. These are: aviation, communications, manufacturing, natural resources, renewable resources including agriculture, scientific instrumentation, and transportation.

Research activities are carried out in support of the following objective:

To identify concepts and ideas key to the understanding and appreciation of the scientific and technological heritage of Canada.

### Strategic Approach

Central to the research program is the identification and analysis of important concepts, ideas, objects and issues key to the historical development of each major subject area. The Corporation has adopted a conceptual theme, the "Transformation of Canada", to provide a framework for its research program.

The transformation of Canada, from the period of early exploration and settlement to the present, has been marked by achievements in science and technology. There is an on-going relationship between science, technology and Canadian society which has changed Canada, influenced its people and will continue to do so.

This primary theme embodies the following sub-themes:

Canadian Context: Canadian achievements reflect the challenges overcome and the choices made in developing the country.

Finding New Ways: The search for new know-ledge and new ways of doing things is basic to human nature. Science and technology play key roles in efforts to find new ways of living, learning and working.

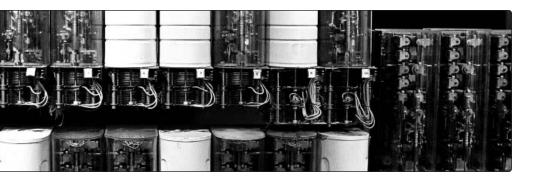
People, Science and Technology: Work and domestic lives are shaped and influenced by scientific and technological change. At the same time, individually and collectively, people shape the evolution of science and technology through their decisions and actions.

Research results generate the knowledge required to make informed decisions regarding the content of the collection, as well as providing the knowledge base for exhibitions, and content for publications and the Web sites.

### Five-Year Perspective

Historical research directed at the theme and subthemes of the "Transformation of Canada" forms a body of knowledge which covers the most important aspects of each major subject area. Major subject areas are subdivided, as required, to break the research into manageable parts which may be completed over several years. Support for exhibitions, interpretative programming and Web presentations is founded on authoritative, quality research, to ensure the accuracy and suitability of the information being communicated. In addition, the To develop and manage a national collection of objects representative of science and technology in Canada.

Collection Development and Management Objective



Corporation plays an active role in producing and publishing research material of a fundamental and material-based nature. It also plays a major role in fostering understanding and sharing its knowledge with other institutions, and in supporting outside researchers.

The Corporation has planned a systematic program of both historical and collection-based research, in order to guide collection development and provide accurate information for exhibitions, interpretative programming and Web and print publications. Pending a review of the Collection Development Plan, basic research in each of the major subject areas will be virtually completed, while updates of past research will continue. Increasing pressure on Corporate resources will, however, require a review of the historical research plan. Table 2 takes into account the growing demand for basic, program, exhibition and publication research, as well as support for an increasing number of mandate-related partnership opportunities.

### Performance Indicator

• Completion of research as per annual plan.

### The Collection

A major challenge for any museum is to determine what items it will collect, how the collection will be organized and how to preserve those items for future generations. The Corporation, as the only comprehensive science and technology collecting institution in Canada, has a special responsibility for the development of a national collection. In view of the breadth of the potential subject matter to be covered, critical choices must be made in determining collection content and priorities.

Collection development and management activities are carried out in support of the following objective:

> To develop and manage a national collection of objects representative of science and technology in Canada.

# Historical Research Plan — 2002-2007

Major Subject	Year	Purpose	Topic
Aviation	2002-2003	Exhibition	Comprehensive Floor Review
	2003-2004	Exhibition	Comprehensive Floor Review (cont'd)
		Exhibition	The Wrights' Influence in Canada
	2004–2005	Exhibition	New General Aviation Island
		Exhibition	Robert W. Bradford Gallery of Aviation Art
	2005–2006	Exhibition Update	Pioneer Island
	2006–2007	Exhibition	Atlantic Bridge: The Early Years of Trans-Atlantic Flight (joint exhibition with other institutions)
		Exhibition	The Power to Fly (engines)
Agriculture	2003-2004	Exhibition Update	Tractors
Communications	2002-2003	Historical Assessment (H.A.) Update	Digital Communications
		Exhibition Update	Connexions
	2003-2004	H.A. Update	Printing
	2005–2006	H.A. Update	Sound Recording
		H.A. Update	Photography
		H.A. Update	Film
		Exhibition	Communication**
	2006–2007	H.A. Update	Book Binding
		Exhibition	Communication
Manufacturing	2005–2006	H.A.	Electro Chemical*
		H.A.	Textiles II**
	2006–2007	H.A.	Textiles II
		H.A.	Electronics*
Natural Resources	2002-2003	H.A. Update	Water Power
		H.A. Update	Petroleum
		Exhibition	Power Generation**
	2003-2004	H.A. Update	Domestic Technology
		Exhibition	Power Generation
		Exhibition Update	Love, Leisure, Laundry
	2006-2007	Exhibition Update	Love, Leisure, Laundry (cont'd)

Major Subject	Year	Purpose	Topic
Renewable Resources	2003-2004	H.A.	Ocean Sciences**
	2004–2005	H.A.	Ocean Sciences
Scientific Instrumentation	2002-2003	H.A.	Metrology
		Exhibition Update	Log On
	2003–2004	H.A.	Medical*
		H.A. Update	Meteorology
	2004–2005	H.A. Update	Astronomy
		Exhibition Update	Space
	2005–2006	H.A. Update	Scientific Instruments
	2006–2007	H.A. Update	Space
		Exhibition Update	Canada in Space
Transportation	2002-2003	Historical Assessment (H.A.)	Automotive Engineering*
		H.A.	Commercial Vehicles**
	2003–2004	H.A.	Commercial Vehicles
		Exhibition	Transportation**
		Exhibition Update	More Than a Machine
	2004–2005	H.A.	Horse-Drawn Vehicles
		H.A.	Fire Technology**
		H.A. Update	Ship Building & Naval Architecture
		H.A. Update	Marine Engineering
		Exhibition	Transportation
		Exhibition Update	Locomotive Hall
	2005–2006	H.A.	Fire Technology
	2006–2007	H.A. Update	Navigational Aides
		H.A. Update	Bicycles
Multi-Disciplinary	2002-2007	Exhibition and Web	Hall of Fame
	2005–2006	Exhibition Update	Innovation in Canada
NOTE			

NOTE:

\*contract research project

\*\*to start in this year

## Collection Development

#### Strategic Approach

The primary purpose of the Corporation's collection is to help people understand how life in Canada has been transformed by science and technology. The principal criterion for evaluating an item's inclusion in the collection is the story that the item tells, and its attendant ability to foster understanding. A focused collection will be achieved by identifying and acquiring the objects and supporting documentation that best reflect a historical framework, and by deaccessioning materials that are not consistent with this framework. It is also essential that all documentation be managed in a professional manner which permits retrieval and adaptation to a variety of dissemination media. Adherence to strict environmental standards and professional conservation activities are also required, in order to ensure long-term preservation of the collection.

Collection development activities apply historical research to help the Corporation make informed decisions on collection content. Following completion of the historical assessment, a collection assessment can then be prepared, comprised of three sections: the ideal collection, a profile of the existing collection, and collection needs, which are obtained by comparing the ideal collection to the collection profile. This process identifies artifacts, or classes of artifacts, to be acquired, as well as

artifacts to be deaccessioned. All decisions regarding the removal of objects from the collection must follow a rigorous procedure, and any proceeds received as a consequence must be re-invested in the collection.

### Five-Year Perspective

The Corporation will maintain an ambitious schedule for the production of collection assessments in all major subject areas (see Table 3). The profiles of ideal collections which result from this assessment process will provide a research-based direction for the enrichment of each aspect of the collection. These ideal collections — in addition to rationalizing the various subject collections — will enable the Corporation to work in partnership with other Canadian museums and publicly-owned collections, in order to identify a "national artifact collection". Such consultation will enable the Corporation to continue the efficient development of its collection, while supporting the identification and celebration of Canada's technological achievements in collections across the nation.

### Performance Indicator

· Completion of collection assessments as per annual plan.

# Collection Assessment Plan — 2002-2007

Vlajor Subject	Year	Торіс
Aviation	2004–2005	Engines
	2005–2006	Propellers
	2006–2007	Flying Clothing
Agriculture	2002–2003	Maple Sap Harvesting/Processing
	2003–2004	Mowers
	2004–2005	Animal Powers
	2005–2006	Threshing Machines
	2006–2007	Milking Equipment
Communications	2002–2003	Telegraphy
	2003–2004	Photography
		Printing II
	2004–2005	Films
		Telephony
	2005–2006	Radio
		Bookbinding
	2006–2007	Electronic Music
Manufacturing	2002–2003	Machine Tools
		Tool & Die
latural Resources	2002–2003	Kitchen Appliances
	2003–2004	Water Power
	2004–2005	Engines
	2005–2006	Gas Appliances
cientific Instrumentation	2002–2003	Chemistry
	2003–2004	Space
	2004–2005	Metrology
	2005–2006	Exploration & Survey
	2006–2007	Radar
		Mathematics
ransportation	2003–2004	Road Construction
	2004–2005	Navigational Aids & Instruments
		Commercial Vehicles
	2005–2006	Ocean Sciences
		Fire Technology
	2006–2007	Horse-Drawn Vehicles
Renewable Resources	2002–2003	Forest Harvesting
	2003–2004	Forest Management

### Collection Management

### Strategic Approach

Collection management encompasses the activities required to manage the objects accessioned into the collection. They fall into two categories: recordkeeping and conservation.

Record-keeping — the Corporation maintains comprehensive records for each item from three perspectives: location and current museum use, history of the item, and condition. The Corporation maintains a rigid inventory control of all collection items, to ensure that each one can be located at all times. A computerized inventory control system is updated regularly, and tracks whether an item is on loan, on display in an exhibition, or in storage.

A second aspect of record-keeping involves the item's history. As part of its documentation and cataloguing activities, the Corporation maintains a separate record on each item in the collection.

The documentation held for each item includes all original records pertaining to the identity, provenance, and legal title of the item. The item is accurately identified, and information regarding significance, function, capacity to operate safely, history of owners, and use is prepared by staff to complete the process. Cataloguing involves the summarization of key documentation information, in a standard format suited to computerized storage and retrieval.

Conservation — conservation reports are required for each object, in order to evaluate the physical condition of artifacts, and to define long-term conservation requirements. This reporting provides a benchmark of the condition of an object when it was initially evaluated and following each subsequent use — either in an exhibition, a program, or for loan purposes. The Corporation intends, over time, to complete conservation reports for all artifacts in the collection.

Priority has been given to preventative conservation (i.e., the safeguarding of collection items for the future), over conservation treatment (i.e., any action taken that directly alters the appearance and/or condition of an artifact). However, the Corporation has adopted the following conservation goals: to retard deterioration and prevent damage through the provision of proper storage, use and handling of collection items, to chemically and physically stabilize collection items, and to clean, repair and provide restoration as deemed appropriate. Conservation activities will continue to conform to international conservation standards and ethics.

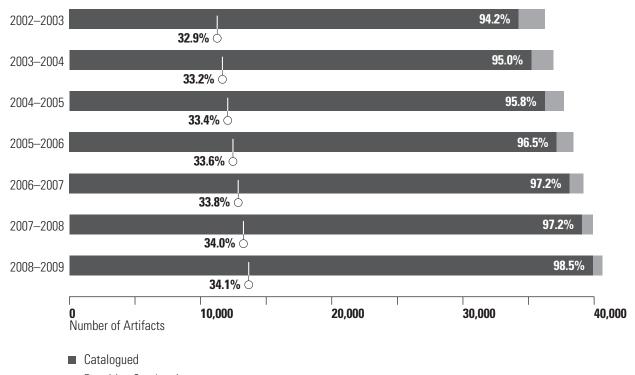
The Corporation has introduced collection storage environmental standards which are used to determine how the collection should be housed. Standards for lighting, heat, humidity, security and maintenance have been defined for collection storage areas and collection display areas. These standards will be used to assist in the allocation of objects to an appropriate storage area, based on composition; e.g., metal, wood, fabric, paper.

### Five-Year Perspective

The Corporation will continue to place a priority on documenting and cataloguing all current acquisitions within a reasonable period, and to upgrade older cataloguing documentation (see Table 4). The Corporation has made significant advances in cataloguing the backlog of artifacts, photographs, drawings and trade literature acquired prior to the full introduction of computer-based collection management. Attention has now been turned to upgrading record quality for Web use. A centralized documentation storage area, with specialized controlled environments, has been created to consolidate the storage of a variety of media materials and collections. These include photographic negatives and prints, engineering drawings, magnetic media, art on paper, lithographic transfers, and audio media. The Corporation remains committed to providing

# Percentage of Artifacts with Conservation Reports

# Percentage of Artifacts Catalogued to CSTMC Standards

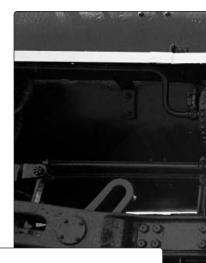


- Requiring Cataloguing
- Percent of Artifacts with a Conservation Report

resources for basic conservation of the collection. Although a priority will be placed on continued completion of artifact conservation reports, existing resources are such that overall progress to reduce the backlog will continue to be slow (see Table 4). Conservation activities will be supported by an emphasis on the improvement and monitoring of environmental standards for all collection storage, in order to ensure preservation of the Corporation's most important assets.

### **Performance Indicators**

- Percentage of artifacts catalogued to CSTMC standards.
- Percentage of artifacts with a conservation report completed.
- · Percentage of artifacts stored in accordance with CSTMC standards.



To provide an enriching museum experience to a broad public audience.

Public Facilities Objective

## **Sharing Knowledge**

The Corporation seeks to engage Canadians in discovering, considering, and questioning past and present developments in science and technology, and the impact of these developments on society and individuals. The Corporation fosters a sense of identity and belonging among all Canadians, as well as pride in Canada's scientific and technological history and achievements. It also encourages active and informed participation by Canadians in the future development of our technological society.

The primary reason for interpreting Canada's scientific and technological heritage is to provide Canadians with meaningful information about themselves and Canada. Just as the Transformation of Canada theme directs research and collection activities, it likewise guides the Corporation in its knowledge dissemination activities. These typically depict the historical development of science and technology, provide information on the objects in the collection, and review the relationships between science, technology and Canadian society.

The Corporation disseminates knowledge to its audiences in three primary ways: through its public facilities, its Web sites and its publications.

### **Public Facilities**

The Corporation manages three museums for the visiting public. A museum visit has the ultimate purpose of providing a learning experience, and the Corporation will continue building on the unique characteristics of museums to help shape this experience. Museums are places of informal, selfdirected learning, where the experience is of a voluntary nature; they exist to impart knowledge and encourage curiosity, and have the capacity to contribute to learning at every stage of life. Museums provide a venue where enriching experiences are offered both through human interaction and through interaction with objects and ideas.

Activities at each of the three museums are carried out in support of the following objective:

> To provide an enriching museum experience to a broad public audience.

### Strategic Approach

Museums traditionally use exhibitions, complemented by interpretative activities, as products to offer to their visiting audience. In selecting exhibition and program ideas, preference is given to those that will afford the best opportunity to utilize curatorial expertise and display artifacts from the collection, while appealing to existing and/or potential visitors. Exhibitions and programs are normally initiated and developed following market studies and comprehensive visitor studies; exhibitions and major programs are assessed through a wide range of evaluation formats.

Exhibition topics are selected for the range of experiences they afford: they must be thoughtprovoking, invite discovery, and allow for acquisition of the widest possible range of knowledge. The comprehension level of text, the ability to touch, hear and see exhibition elements, the relevance of the thematic approach or subject matter, and the potential level of interactivity are all aspects of a successful exhibition. In light of its significant investment in exhibitions, the Corporation has adopted an exhibition development process, which provides a systematic, disciplined approach for each exhibition project. The Corporation's museums maintain exhibition master plans for a five-year planning period



covering all exhibition development, including travelling exhibitions. These plans provide for a regular cycle of exhibition replacement and update.

A broad range of interpretative programming is offered to complement exhibitions and broaden and enhance the visitor experience. These include school programs, demonstrations, workshops, tours, theatrical presentations and special events aimed at increasing the public's understanding of its scientific and technological heritage, as well as illustrating the theories and principles of science and technology.

The primary target audience for the Corporation's museums has been defined as family groups; i.e., adults with children. Attracting children to its museums is important in fulfilling the Corporation's mandate and in supporting the Government of Canada's objectives for youth and children, and special attention is given to the development of programs aimed at school groups. These programs will continue to be delivered by trained educators, in order to maintain a high level of qual-

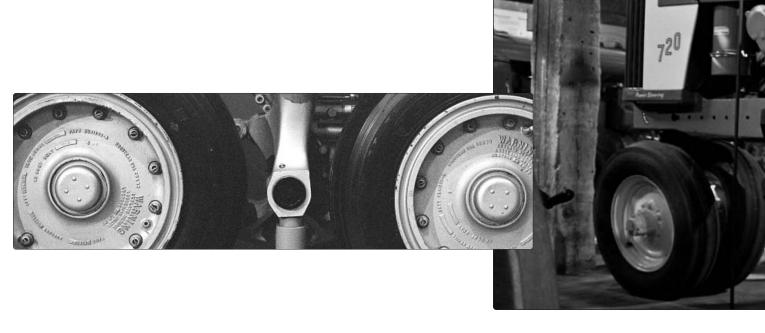
ity and relevance, and to keep them responsive to teacher needs. Adults visiting without children make up a significant portion of the audience, especially at the Canada Aviation Museum. The Corporation will therefore develop strategies to further attract this particular segment, without sacrificing its emphasis on the family audience.

In order to make informed decisions, the Corporation maintains a program of market surveys and comprehensive visitor studies. It also monitors satisfaction levels on a regular basis. The level of satisfaction is dependent on many factors, including the exhibitions themselves, visitor amenities and opportunities for social interaction. The latter is important, as most visitors come in groups of family and/or friends. This creates a social dimension to the visit, which is taken into account in the design of programs and methods of presentation. The Corporation believes that the optimal visitor experience includes both learning and pleasure, in an environment emphasizing human presence, active participation, accessibility, creativity, credibility, comfort and fun. The quality of the cultural experience will continue to be enhanced by the highest quality of visitor services, ensuring a safe and comfortable visit, commensurate with our role as host, and theirs as our guests.

# Five-Year Perspective Canada Science and Technology Museum

The Museum has an exhibition plan which provides for a regular cycle for replacement and update of its exhibition halls at a rate of one long-term exhibition every two years. The Museum also maintains a program of temporary exhibitions. The goal of the exhibition program is, over time, to give visitors balanced exposure to the various subject areas covered by the Museum, as well as providing them with an opportunity to view a representative portion of the collection.

Exhibitions will continue to be artifact-rich, and efforts will be made to develop exhibitions in a cost-effective manner, without creating a negative impact upon the visitor experience and, by extension, attendance and revenues. As appropriate, exhibition partnership opportunities with other institutions will be explored. The Museum will continue to offer a number of travelling exhibitions to other institutions as part of its efforts to maintain a national presence.



To sustain visitor interest, the Canada Science and Technology Museum will maintain high-quality interpretation activities on the floor and on the museum grounds. These will include demonstrations, guided tours, and special activities such as artifact demonstrations and joint efforts with schools, community groups and associations. School groups will continue to be a focus with programs offered relevant to the school curriculum.

Of particular note is the Canadian Science and Engineering Hall of Fame, which is housed and operated within the Museum. The Hall of Fame promotes Canadian achievements and careers in science and engineering. The inductees — chosen by a Selection Committee composed of distinguished Canadians who represent prestigious scientific and engineering organizations across the country have all had a lasting impact stretching over several decades, and provide role models for today's youth. The Hall of Fame has grown since its early days as a joint project of the National Research Council and the Museum. Over the next few years, the Museum will endeavour to increase national exposure of the Hall of Fame by promoting the

annual induction event nationally, and by highlighting the contributions of the inductees. The Innovation Canada exhibition, which will open at the Museum in July 2002, will be the new permanent home of the Hall of Fame, and will give it additional prominence.

### Performance Indicators

- Percentage of exhibitions completed on schedule and within budget.
- Number of visits per year.
- Degree of visitor satisfaction.
- Number of visits resulting from school groups.
- Degree of teacher satisfaction.

### **Canada Aviation Museum**

The approval of funding for the Museum's new open-storage wing has had a large, but predictable impact on the exhibition plan. For this reason, the Canada Aviation Museum has placed certain aspects of previous plans in abeyance, in order to conduct a major review of the entire Museum floor. The aim will be to revise the long-term master plan, taking into account the greatly expanded areas that will become available for exhibitions and programming. While it remains impossible to tell all the stories the Museum would like to tell, the Museum expects that this review process will enable it to

give visitors a greater appreciation of the collection, and of the Museum's expertise in interpreting the sweep of Canada's aviation heritage.

The exhibition program will also continue to address the needs of current visitors; the concept of achievable, affordable change which encourages repeat visitation will remain an ongoing challenge. In the meantime, this exciting and demanding situation has the potential to reinvigorate the Museum's travelling exhibitions program. The intent will be to maximize the effect of the Museum's own temporary exhibitions, and to expand inter-museum contacts, by bringing in more exhibitions from outside institutions, as well as by exploring ways to create new joint exhibitions, thereby enabling resources to be more effectively utilized.

The Museum will focus on delivering informative, relevant and innovative on-site programming emphasizing Canada's aeronautical heritage for a variety of age groups and interest groups. Efforts will be made to increase interactive interpretation with the visitor through such activities as demonstrations, costumed vignettes, discovery kits for children and their families, and "flight experiences", both virtual and real, through the Museum's



contracted Vintage Flying Experience program. Program information and interpretation materials will be shared with other aviation museums as part of the Museum's leadership position within the Canadian aviation museum community. The Museum will continue to provide high-quality school programming to complement school curricula featuring aviation in the context of history, science and technology and geography. Partnering opportunities with other cultural and science and technology-based institutions, in the area of programming, will be explored as a way of enhancing the delivery of the Museum's mandated activities.

The planning period encompasses both the end of the first century of powered flight, and the December 2003 centenary of the first flight by the Wright Brothers, which will be celebrated around the world. In the context of these events, the Museum will continue to develop programming on the past, present and future of aviation and flight, both in terms of Canada's experience, accomplishments and prospects and, in collaboration with its national and international colleagues, the impact of powered flight on the course of global development.

#### Performance Indicators

- · Percentage of exhibitions completed on schedule and within budget.
- Number of visits per year.
- Degree of visitor satisfaction.
- Number of visits resulting from school groups.
- Degree of teacher satisfaction.

### Canada Agriculture Museum

The long-term priorities for the Canada Agriculture Museum are to improve the quality of the visitor experience through the replacement and update of exhibitions, and the delivery of high-quality interpretative and school programs. A long-term exhibition plan has been developed to guide the replacement of exhibitions. The current exhibition space is not suitable for use during the winter months, and the feasibility of using part of another existing building as a future location for year-round exhibitions is being reviewed with Agriculture and Agri-Food Canada — owner of the building. If the venue for exhibitions changes, the long-term exhibition plan would have to be reviewed.

The Museum will continue to build on its existing range of innovative programming which is aimed at fostering an understanding and appreciation of Canada's agricultural heritage. Hands-on programming with animals, plants and food will be featured, and special weekend theme events such as the Ice Cream Festival will continue to be offered. School programs will continue to be developed in line with new curricula for the primary and secondary levels, with an ongoing emphasis on science and technology. These programs will be increased, towards a long-term objective of making students 20 to 25% of total attendance. There is now an opportunity to further expand the Museum, through a permanent exhibit and more programs, and by making it into a year-round operation; however additional resources will be required.

The Museum has begun to proactively seek and develop partnerships with various agricultural institutions and museums in Canada and internationally. In particular, the Museum will play a key role on the Presidium of the Association Internationale des Musées d'Agriculture, and on the board of the Association for Living History, Farms and Agriculture Museums over the next few years. To disseminate information on the agricultural collection to all Canadians, the Museum's Web site will soon feature profiles of its collection.

To make the Corporation's intellectual assets available to a national and international audience.

Web Sites Objective

The Museum has been a key participant in the consultation process on the future of the Central Experimental Farm, currently managed by Agriculture and Agri-Food Canada, and will continue to participate on the C.E.F. Advisory Council.

The Museum will pursue discussions on the development of its Master Site Plan, and will address issues such as the availability of additional buildings to possibly house the agriculture artifact collection on-site.

#### **Performance Indicators**

- Percentage of exhibitions completed on schedule and within budget.
- Number of visits per year.
- Degree of visitor satisfaction.
- Number of visits resulting from school groups.
- Degree of teacher satisfaction.

### **Web Sites**

In a very broad sense, electronic information technology in general, and the World Wide Web in particular, are evolving as major dissemination tools for museums. Combined, they provide unprecedented opportunities for reaching a far broader audience than could ever be welcomed to the exhibition floor, with a much greater range of products and services, while also providing a new means of facilitating public access to knowledge.

The Corporation's use of the World Wide Web will be carried out in support of the following objective:

To make the Corporation's intellectual assets available to a national and international audience.

### Strategic Approach

The Corporation intends to develop its Web presence to serve three principal goals:

- provide the public with direct access to the collection and research results;
- offer new products which take advantage of the unique properties of the Internet as a communications medium, and
- promote the Corporation's museums and services to a wider and more clearly defined audience.

The Corporation will take advantage of the nature of the Internet itself to reach a broad national and international audience, and will use the interactivity of the Web to enable visitors to share ideas and opinions and provide feedback to the Corporation. The Web's inherent ability to connect with individuals will be used as a means of responding to users' needs, and to provide detailed or general information as required.

The Government of Canada has made a commitment to deliver key government services electronically to all Canadians by the year 2004. Several initiatives are underway to increase the availability of cultural content. The Corporation looks forward to contributing to these initiatives, and to making its intellectual assets available to all Canadians as well as international audiences, provided that sufficient resources can be made available.

### Five-Year Perspective

The Corporation will continue its efforts to provide access to its rich collection holdings and the knowledge inherent in them. Access to the Corporation's collection will improve dramatically through the addition of a Web-enabled version of the collection and library databases. This will include images of artifacts and the results of artifact research, as well as basic collection data. In addition, development of a search facility which will link related data about artifacts, library materials, trade literature, technical drawings and photographs will be completed during the planning period.

The Corporation has made considerable progress over the past several years in digitizing artifact images and materials. During the planning period, priority will be given to the digitization of related research material, photographs, drawings,



and video and audio records to support the artifact base. The CN Gallery will be enlarged to include at least 5,000 images by the end of the planning period, and additional images from the aviation archival collection will also be added. Publications related to the collection, including *Collection Profiles* and *Curator's Choice*, will continue to be extended to new subject areas, and developed to include audio, video and animated material. Increased access will be provided to longer research documents and publications, and a new publication, *A Closer Look*, focussing on specific artifacts, will be developed. Consideration will also be given to the electronic distribution of other publications, such as the *Material History Review*.

In addition to providing significant amounts of reference material on the collection, the World Wide Web allows the Corporation to produce and distribute, to a vast audience, specialized intellectual products which provide context and meaning to Canada's scientific and technological heritage. A project identified the types of products most in demand; as a result, a proposal was developed for a product grounded in the "Transformation of Canada" theme, featuring applications which demonstrate how all aspects of science and

technology have changed Canada. Such a project would require financial and human resources not currently available internally. Outside sources of funding and partnerships will thus be explored. The Corporation will also develop information on more specific audiences, in order to tailor new products to the shifting patterns of the marketplace.

At present, the Web sites provide quite complete information about the Museums, helping individuals and groups to plan their visits. This material will be supplemented with more interactive facilities for on-line reservations and product sales; general information about the Corporation, such as the annual report and the corporate plan summary, and on-line surveys about the sites and the Museums. The Corporation is a partner in the Government of Canada's Service Canada initiative, and the sites will be accessible from the Canada Place Web site and physical kiosk facilities across Canada.

Delivery of on-line services requires a substantial, continuing commitment of financial and human resources. The Corporation has already made a substantial investment in hardware and software. It is also evident that successful on-line services will create new demands on curatorial and program

staff, particularly in the areas of content development and publishing. These services are being provided in addition to all traditional museum services, and cannot be developed much further without additional resources. While sponsorships and partnerships — as well as initiatives such as Government On-line and the Canadian Digital Cultural Content Initiative — may provide some start-up resources, what is really needed is an ongoing resource base to maintain and support these new services.

### **Performance Indicators**

- Number of Web site visitors.
- Duration of stay.



### **Publications**

The accumulated knowledge resulting from research, collection and preservation activities must be shared with the wider world, in order to promote understanding of Canada's scientific and technological heritage. This knowledge is of value to other museums, other researchers and interested members of the public across Canada and internationally. Publications are an effective method of sharing this information.

Publication activities are carried out in support of the following objective:

> To make the Corporation's knowledge base available to a national and international audience.

### Strategic Approach

Several approaches have been devised in order to meet the Corporation's publication goals. Specialized material is published in a variety of formats best suited for use by the general public, other museums and other researchers. A selection of the most

interesting historical assessment documents are published in the in-house *Transformation* series. Special topic articles, research reports and reviews on varied themes in Canada's material culture contributed by external and staff specialists, appear in the serial Material History Review. A more popular audience is reached in the Collection Profiles series and through the Curator's Choice series, which provides additional curatorial insight to enhance all major exhibitions. Finally, occasional monographs are produced which may be directed at specialized audiences

### Five-Year Perspective

The Corporation will continue to undertake evaluation studies of its current publication offerings and review its overall plan, in order to ensure that clients obtain maximum benefit from the Corporation's rich collection and research resources.

The Corporation will emphasize the Webbased presentation of new monographs, and will carefully monitor demand for scholarly publications, as well as those of more general interest, in order to determine the extent to which electronic distribution may be more effective than print production. Surveys will be done to determine more accurately

what types of information the national and international Web audience may require. The Corporation intends to continue production of occasional monographs, and all of the existing basic publication series which currently exist, and intends to investigate the increased production of titles in the Transformation series.

### Performance Indicator

· Complete publications as per annual plan.



To increase the financial resources available to the Corporation for the fulfilment of its mandate.

Revenue Generation Objective

### **Support Activities**

A number of activities are carried out in support of the museological activities of the Corporation. These include revenue generation, facilities management, informatics and administration.

### **Revenue Generation**

Revenue generation provides a means by which the Corporation can supplement its government appropriation, and thereby contributes to the fulfilment of its mandate. The success of revenue generating initiatives depends on a sound knowledge of markets, and the development of attractive and saleable products.

Revenue generating activities can also help the Corporation to establish links with its supporters and various communities. The Corporation and its museums can benefit from strengthening these alliances — whether to individuals, through activities such as its membership program, or to the corporate sector through sponsorship initiatives.

Revenue generating activities are carried out in support of the following objective:

To increase the financial resources available to the Corporation for the fulfilment of its mandate.

### Strategic Approach

The Corporation will undertake a range of revenue generating initiatives. Any such activities will be within the parameters and spirit of the mandate. For each activity, a review will be done, to ensure that there will be an acceptable return on investment before proceeding.

Revenue generating activities have been grouped into three categories:

Cost Recoveries: fees charged to offset a portion of the cost of providing services in support of the Corporation's mandate. Activities will be assessed to ensure that user fees are appropriate to the services provided, and that the fees do not serve as a deterrent to the use of these services.

Commercial Operations: activities carried out for the purpose of generating net profits, while contributing to the visitor experience. Profits will be used to support museological programs. These initiatives will be run using profit/loss financial statements to monitor their profitability. In choosing opportunities, preference will be given to those which complement the Museums' programs and collections.

Corporate Development: activities designed to offer opportunities for members of the public and private sectors to associate themselves with museum activities. The Corporation has adopted a tripartite approach to corporate development. The first cluster of activities deals with commercial sponsorship of the Corporation's properties, focussing on exhibitions, programs, and events, as well as initiatives associated with the Web sites. In the selection of exhibitions or programs, their sponsorship potential will be assessed during the early stages of the development process. The second cluster is based on a broad membership program which encourages a close relationship between the local audience and the Corporation's museums. The membership package will continue to offer a range of benefits to attract new members and maintain renewal rates. The third cluster is the philanthropic activity of fundraising, including annual giving campaigns, major gift programs, planned giving, and soliciting support from foundations. The focus will be on identifying and targeting those segments of the public that would be most likely to support the Corporation and its constituent museums as cultural institutions.

## Revenue Plan — 2002-2007 (in thousands of dollars)

Source	2002	2–2003	200	3–2004	200	4–2005	200	5–2006	200	6-2007
Operations:										
Cost recoveries: Admissions and Programs Science and Technology	\$	800	\$	800	\$	800	\$	800	\$	800
Aviation		490		480		480		480		480
Agriculture		280		280		280		280		280
Other		505		510		530		530		530
Commercial Operations		1,165		1,165		1,165		1,165		1,165
Corporate Development		605		605		605		605		605
Interest		175		150		150		150		150
Total	\$	4,020	\$	3,990	\$	4,010	\$	4,010	\$	4,010

### Five-Year Perspective

The Corporation will continue to actively pursue revenue generating activities. However, the success of certain activities, such as admissions and gift shops, is highly dependent upon attendance. The Corporation has based its revenue projections for these activities on stable attendance for the planning period. Similarly, sponsorship is affected by the nature of the Corporation's public programming initiatives. Budgets will be revised to take account of changes in attendance patterns and new revenue opportunities as they occur. The revenue plan over the next five years is set out in Table 5.

In considering revenue potential, it should be noted that none of the Corporation's museums was equipped with amenities which lend themselves to revenue generating activities. The institutions, therefore, have a limited capacity for business activities such as an IMAX® cinema or facility

rentals which, in many instances, are substantial sources of revenue for museums. However, the Corporation intends to increase the range of goods and services offered for sale through the Web sites. In addition to the on-line catalogues of gift shop items, it is expected that there will also be a demand for copies of photographs, drawings and other collection material, once greater access to these is provided, and once copyright issues are resolved. During the planning period, it is likely that facilities to enable customers to pay on-line for these products, and for public program reservations, will be added to the sites. The Corporation will continue to review other opportunities in which its expertise could generate revenue.

#### Performance Indicator

• Percentage of revenue targets reached.

To provide quality venues for public programming activities and protection of the collection, and to promote operational effectiveness.

Facilities Objective



### **Facilities**

Facilities are an integral part of museum operations. They do more than house staff; they also provide a venue for the public, and housing for the collection.

Facilities have a profound effect on museum visitation. Appropriate museum architecture attracts visitors, contributes to the actual museum experience, and becomes part of an institution's public image, as a symbol of its mandate. A large proportion of visitor comments allude to satisfaction or dissatisfaction with the quality of the facilities and related services. Providing services for museum visitors requires special efforts not usually associated with office space.

Similarly, the provision of appropriate collection storage space is essential for the long-term safeguarding of the collection. This requires control over all environmental factors which can be agents of deterioration. The size of some of the artifacts in the collection also raises specific needs in terms of access, and the ability to move these artifacts when required.

Facility activities are carried out in support of the following objective:

To provide quality venues for public programming activities and protection of the collection, and to promote operational effectiveness.

### Strategic Approach

The Corporation will maintain a long-term accommodation plan to ensure the effective use of its facilities, in order to meet its public programming and collection storage needs. Because the Corporation occupies a number of leased buildings, efforts will be made to take advantage of prevailing market conditions, and to reduce costs whenever possible.

With respect to public programming activities, site development plans have been prepared for each display facility. Although funding does not exist to fully implement these designs, all incremental decisions relating to the sites will be taken in the context of these plans.

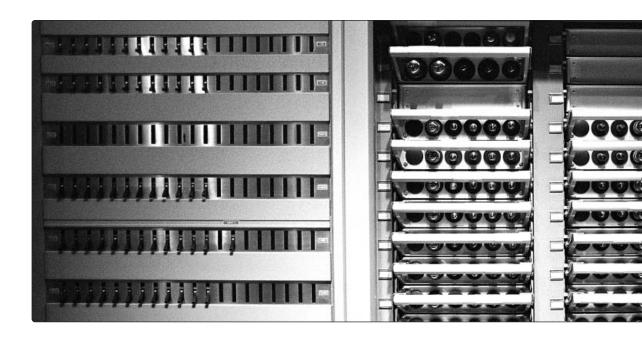
Appropriate collection storage space is essential to meet the long-term preservation needs of the collection. To properly house artifacts, storage facilities in most instances require environmental controls to regulate temperature and humidity levels, air quality and lighting. These requirements

will be taken into consideration when reviewing storage space, and when assigning artifacts to warehouses.

For all of its facilities, the Corporation will maintain a regular program of building inspections to provide for timely maintenance and the avoidance of potential costly repairs to correct undetected problems. Compliance with applicable building and safety codes will also be monitored on a regular basis.

### Five-Year Perspective

Major improvements and repairs to buildings and sites will be carried out on a priority basis. Health and safety concerns and efficiency of operations will be considered as key elements for assigning priority. Given that the leases of some of the buildings occupied by the Corporation will expire during the planning period, it will be necessary to undertake a review of these leases, as details of the new facility project become known.



### The Canada Science and Technology

Museum building has exceeded its useful life. The structure is over 35 years old, and substantial investments in the electrical and mechanical systems will be required to keep the facilities in service over the next few years. Efforts will be made to minimize these investments and stretch the life of current assets as the Corporation completes its study and plans for a new building. In the short term, the parking lots and walkways will have to be resurfaced, and an assessment of the condition of infrastructure services such as water supply and storm sewers will be completed.

With the completion of the consolidation of warehouse space for collection storage, the Corporation will continue its efforts to improve compliance with corporate standards for lighting, temperature variation, cleaning and artifact access in the collection storage areas. The general warehouse grade of the collection storage areas makes it particularly difficult to meet standards for conditions such as humidity level.

At the Canada Aviation Museum, the possibility of incorporating the proposed new administration building into the collection storage hangar building will be reviewed. Collapsing the two projects into one will likely be a more cost-effective approach to construction.

A Memorandum of Understanding with the Rockcliffe Flying Club is in place to provide for the operation of an airfield on the site. Following recent revisions to the boundaries of the site, it was decided that the Club could remain in its present location. The newly acquired lands will require management and investment on the Corporation's part. Increased airport security measures put in place since the terrorist attacks in September 2001 may necessitate the replacement of the airport's perimeter fence.

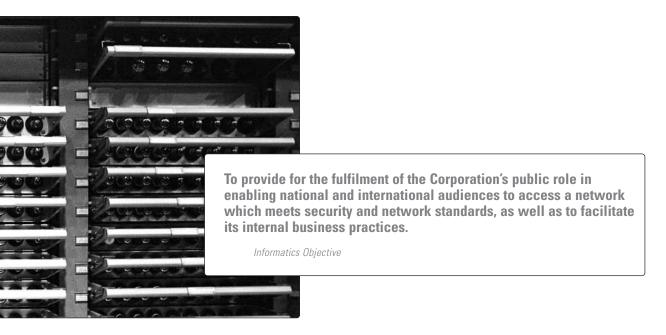
A further project is the conversion of the heating and cooling system from electricity to a more cost-effective source of energy. Proposals have been received which indicate that substantial energy savings are available with a change to a groundwater-based heating and cooling system, together with the streamlining of duct-work and optimization of air-handling equipment. Phase I, which consists of optimizing the current HVAC system, is underway. Phase II will be completed during construction of the new storage hangar.

The Corporation's plans for the **Canada** Agriculture Museum include occupying the remainder of Building 94 for office space and a new exhibit area, which could be used for year-round exhibitions. The Corporation also intends to revise its agreement with Agriculture and Agri-Food Canada by adding more pasture land and hay storage facilities on the site, in accordance with the site plan. Additional resources for facility services will be required to meet needs arising from the increases in activity levels.

Occupancy cost per square metre will be monitored, and costs controlled in order to meet established targets for facility management. The occupancy cost target has been revised to reflect expected increases in utility and labour costs.

### **Performance Indicators**

- · Maintain percentage of buildings that meet health, safety and building codes.
- Total occupancy cost per square metre.



### **Informatics**

Informatics activities include the provision of advice, support services and the management of services related to information technology, such as market trends, the e-commerce environment, as well as technology assessment, evaluation and selection. The Corporation endeavours to optimize the investments it has made in computer technologies, software and staff by striking an appropriate balance between the needs, expectations and desires both of the public and of staff.

Informatics activities are carried out in support of the following objective:

To provide for the fulfilment of the Corporation's public role in enabling national and international audiences to access a network which meets security and network standards, as well as to facilitate its internal business practices.

### Strategic Approach

A corporate information technology strategy divides the work of the Corporation internally and externally, and identifies developmental priorities. Working groups are formed to determine the best approach in the priority areas as outlined below:

- assessing and completing a corporate short-term network upgrade toward a stable, dependable IT architecture, while forecasting medium- and long-term network upgrades;
- improving and maintaining the integration of Web site management within the corporate structure;
- defining and increasing usage of the corporate intranet, with an appropriate document control solution;
- developing a database management system for corporate applications;
- furthering the availability of digital image collections;
- revisiting software standards linked to business practices for the Corporation;
- creating and implementing a security and data protection plan, and
- developing and implementing a corporate staff training plan.

### Five-Year Perspective

The Corporation will continue to review current trends and likely developments in hardware, software and communications during the planning period. Corporate priorities will reflect existing

limitations. Necessary tasks include completion of the internal corporate network; improved integration of Web site management into the corporate structure; increased use of the corporate intranet; developing a database management system for corporate applications; furthering the availability of digital images; completing implementation of the collection management system, and implementing an archival management system.

Current corporate business-IT alignment strategies — including technology mapping and planning, architecture design and infrastructure framework, partners and providers — are currently being assessed. This should pave the way for the measurement of effectiveness and benchmarking for the Corporation's Informatics Services, while capitalizing on existing and emerging support services.

### Performance Indicator

• Under development.



### Administration

Administration activities include the provision of advice, support services and control of resources. The Corporation endeavours to optimize its investment in administrative activities by striking a balance between the quality of service and its cost.

Administration activities are carried out in support of the following objective:

> To provide effective and efficient services within a framework of appropriate management control.

### Strategic Approach

As a federal Crown corporation, the CSTMC is subject to numerous pieces of legislation and many regulations and government policies. The Corporation's strategy may be summarized as good corporate citizenship; that is, the Corporation strives to ensure that it operates effectively, efficiently and economically in accordance with legislative requirements, sound business practices and ethical management standards.

The Corporation recognizes the importance of its workforce and their contribution to the accomplishment of the Corporation's mandate and objectives.

### Five-Year Perspective

Improvements in human resources management will continue to be given priority during the planning period, in order to ensure the availability of staff with the competencies and experience required for key positions. The electronic Human Resources Information system will be replaced with a system which will more accurately reflect employee profiles, and which will become the basisfor future HR planning. The Corporation will implement a new classification system early in the planning period.

In the present environment, the emphasis will continue to be on effective management of operational overhead. A new information technology strategy and plan will be implemented over the next three years, taking advantage of the Corporation's investment in computers to provide effective and efficient support of program delivery. For administrative systems, the strategy provides for the development of more intranet services, and the further integration of administrative systems, in order to reduce time spent on capturing repeat data and to improve reporting.

### Performance Indicator

• Percentage of resources allocated to overhead.

# Financial Summary

### 2002-2003 to 2006-2007

The following table includes the balance sheet, statement of income and retained earnings, and statement of changes in financial position for the preceding and current financial years and the planning period. Revenues reported are gross revenue before expenses.

### Notes:

- 1. Revenues from Corporate Development activities fluctuate from year to year, depending on the availability of properties for sponsorship and the opportunities for fundraising. Budgets are adjusted yearly within a five-year average, and firm targets are established for Year One of the plan. It should be noted that in-kind contributions are not included in the corporate development budget totals.
- 2. Some budget totals for activities such as collection management have been affected by a corporate restructuring which occurred in 2001.

## Financial Summary for the Preceding and Current Financial Years and the Planning Period

(in thousands of dollars)							
	2000 2001	2001 -2002	2002 2003	2003 2004	2004 2005	2005 2006	2006 2007
BALANCE SHEET							
ASSETS							
Current							
Cash and short-term investments	\$ 1,678	\$ 3,329	\$ 2,811	\$ 2,413	\$ 2,485	\$ 2,557	\$ 2,609
Accounts receivable:							
Government departments	3,490	450	450	450	450	450	450
Other	418	200	200	200	200	200	200
Inventories	403	400	400	400	400	400	400
Prepaid expenses	233	50	50	50	50	50	50
	6,222	4,429	3,911	3,513	3,585	3,657	3,709
Restricted cash and investments	241	185	190	195	200	210	210
Collection	1	1	1	1	1	1	1
Capital assets	8,885	9,575	11,600	22,520	26,665	25,450	24,381
	\$ 15,349	\$ 14,190	\$ 15,702	\$ 26,229	\$ 30,451	\$ 29,318	\$ 28,301
LIABILITIES AND EQUITY OF CANADA							
Current							
Accounts payable and accrued liabilities							
Government departments	\$ 126	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300
Others	1,630	1,600	1,600	1,600	1,600	1,600	1,600
Current portion of accrued employee severance benefits	153	60	60	60	60	60	60
Deferred revenues	276	_	_	_	_	_	
	2,185	1,960	1,960	1,960	1,960	1,960	1,960
Accrued employee severance benefits	1,262	1,280	1,300	1,320	1,340	1,360	1,360
Deferred Contributions	241	185	190	195	200	210	210
Deferred capital funding	10,138	9,575	11,600	22,520	26,665	25,450	24,381
Equity of Canada	1,523	1,190	652	234	286	338	390
	\$ 15,349	\$ 14,190	\$ 15,702	\$ 26,229	\$ 30,451	\$ 29,318	\$ 28,301
-							

### Financial Summary for the Preceding and Current Financial Years and the Planning Period

(in thousands of dollars)							
	2000 2001	2001 -2002	2002 -2003	2003 2004	2004 2005	2005 2006	2006 -2007
STATEMENT OF OPERATIONS AND EQUITY OF C	ANADA						
REVENUES							
Cost Recoveries							
Admission and Programs							
Science and Technology	\$ 833	\$ 800	\$ 800	\$ 800	\$ 800	\$ 800	\$ 800
Aviation	496	490	490	480	480	480	480
Agriculture	284	280	280	280	280	280	280
Other	440	510	505	510	530	530	530
Commercial Operations	1,059	1,140	1,165	1,165	1,165	1,165	1,165
Corporate Development	458	640	605	605	605	605	605
Interest	195	200	175	150	150	150	150
Total Revenues	\$ 3,765	\$ 4,060	\$ 4,020	\$ 3,990	\$ 4,010	\$ 4,010	\$ 4,010
EXPENSES							
Collection Management	\$ 6,249	\$ 6,400	\$ 4,700	\$ 4,700	\$ 4,700	\$ 4,700	\$ 4,700
Public Facilities							
Science and Technology	6,562	7,000	8,420	8,420	8,420	8,420	8,420
Aviation	4,179	4,400	4,200	4,200	4,500	4,500	4,200
Agriculture	2,042	2,100	2,200	2,200	2,200	2,200	2,500
	12,783	13,500	14,820	14,820	15,120	15,120	15,120
Management Support							
Directorate and Board	735	850	845	845	845	845	845
Corporate Development	626	500	500	500	500	500	500
Accommodation	297	650	1,600	1,150	400	400	400
Protection	213	420	320	320	320	320	320
Administration	3,170	3,200	3,400	3,400	3,400	3,400	3,400
Amortization, etc.	1,245	1,306	2,382	3,071	3,636	3,470	3,325
	6,286	6,926	9,047	9,286	9,101	8,935	8,790
Total Expense	25,318	26,826	28,567	28,806	28,921	28,755	28,610
Excess of Expenses over Revenue	21,553	22,766	24,547	24,816	24,911	24,745	24,600
Parliamentary appropriation	22,594	22,433	24,009	24,398	24,963	24,797	24,652
Net Income (Loss)	1,041	(333)	(538)	(418)	52	52	52
Equity of Canada at the beginning of the year	482	1,523	1,190	652	234	286	338
Equity of Canada at the end of the year	\$ 1,523	\$ 1,190	\$ 652	\$ 234	\$ 286	\$ 338	\$ 390

Table 6 – continued

### Financial Summary for the Preceding and Current Financial Years and the Planning Period

-2001 -2002 -2003 -2004 -2005 -2006 -2006 -2005 -2006 -2006 -2005 -2006	<b>2006 2007</b> 52
STATEMENT OF CASH FLOWS	
Cook flow from analysis	52
Cash flow from operations	52
Net Income (Loss) \$ 1,041 \$ (333) \$ (538) \$ (418) \$ 52 \$ 52 \$	
Adjustments for non-cash items	
Amortization of capital assets 1,245 1,306 1,582 3,071 3,636 3,470 3	3,325
Amortization of deferred capital funding (1,245) (1,306) (1,582) (3,071) (3,636) (3,470) (3	3,325)
Contributions recognized as revenue (155) (40) (40) (40) (40)	(40)
886 (373) (578) (458) 12 12	12
Change in non-cash operating assets and liabilities (2,950) 3,219 0 0 0 0	0
Change in accrued employee severance benefits 4 18 20 20 20 20	0
Total cash flow used in operations 2,060 2,864 (558) (438) 32 32	12
Cook flows from investing activities	
Cash flow from investing activities	050
	2,256)
Increase in restricted cash and investments (10) 56 (5) (5) (5) (10)	0
Total cash flows used in investment activities (1,257) (1,940) (3,611) (13,996) (7,786) (2,266) (2	2,256)
Cash flow from financing activities	
Funding for the acquisition of capital assets 2,499 743 3,606 13,991 7,781 2,256 2	2,256
Restricted contributions and related investment income 165 (16) 45 45 50	40
Total cash flow from financing activities 2,664 727 3,651 14,036 7,826 2,306 2	2,296
Increase (Decrease) in cash         (653)         1,651         (518)         (398)         72         72	52
Cash and short-term investments at the beginning of the year 2,331 1,678 3,329 2,811 2,413 2,485 2	2,557
	2,609

# Operating Budget Summary 2002-2003

The Canada Science and Technology Museum Corporation's Operating Budget for 2002–2003 is \$28,567,000. This Budget is presented on the accrual basis of accounting.

(in thousands of dollars)

	2002–2003 Budget		2001–2002 Budget		
REVENUE					
Operations:					
Cost Recoveries					
Admission and Programs					
Science and Technology	\$	800	\$	820	
Aviation		490		450	
Agriculture		280		235	
Other		505		380	
	\$	2,075	\$	1,885	
Corporate Development		605		550	
Commercial Operations		1,165		1,040	
Interest		175		150	
Revenue from operations	_	4,020		3,625	
Appropriations					
Main estimates		24,883		22,884	
Program integrity/security		1,200		_	
Purchase of capital assets		(3,606)		(2,556)	
Amortization of deferred capital funding		1,582		1,515	
Revenue from appropriations		24,009		21,843	
Total Revenue	\$	28,029	\$	25,468	

### (in thousands of dollars)

	2002–2003 Budget	2001–2002 Budget		
EXPENSES				
Collection Management	\$ 4,700	\$ 6,100		
Management of Public Facilities				
Science and Technology	8,420	6,250		
Aviation	4,200	4,400		
Agriculture	2,200	1,900		
	14,820	12,550		
Common Support Activities				
Directorate and Board	845	520		
Development	500	490		
Accommodation	1,600	385		
Protection	320	210		
Administration	3,400	2,965		
	6,665	4,570		
Other Expenses				
Reserves	800	_		
Amortization	1,582	1,373		
	2,382	1,373		
Total Expenses	28,567	24,593		
Surplus (Deficit)	\$ (538)	\$ 875		

### **Assumptions**

The operating budget for 2002–2003 is based on the following assumptions:

### **Admissions**

The estimated revenue from admission fees for 2002-2003 is based on the assumption that attendance will remain stable. The estimates do not include any price changes which may occur in 2002-2003.

#### Other Cost Recoveries

The Corporation provides a variety of services on a cost-recovery basis to museum visitors and other clients. These services include travelling exhibitions, farm operations and facility rentals. Revenue from these services has shown a steady increase; enhancement to the dairy barn should result in further increases in farm operations revenue.

### **Commercial Operations**

Revenues from the gift shops and cafeterias at the Canada Science and Technology Museum, the Canada Aviation Museum and the Canada Agriculture Museum depend directly upon the number of visitors to the museums. Given that the store at the Canada Science and Technology Museum is operating at full capacity during the main visitor season, no increase is projected in the immediate future. Receipts for the store at the Canada Aviation Museum have been increasing, but are expected to stabilize. Plans include operation of an off-site gift shop which will materialize only if a retail location can be obtained which provides an acceptable return on investment. A small profit is also expected from catalogue sales. Results will continue to be reviewed and projections will be adjusted in future plans. Increased use of the Web sites for sale of products is planned, and once the logistics of providing a secure site for credit card transactions have been worked out, sales are expected to further increase in the latter part of the year.

Food services are operated on a contract basis. The expected results represent the rental income.

The Corporation also operates simulator experiences at Canada Science and Technology Museum and the Canada Aviation Museum. These operations have the objective of enhancing visitor's enjoyment, as well as returning a net profit.

#### Interest

This item consists primarily of interest revenue and compensation for the collection of provincial taxes.

### **Corporate Development**

Development activities include sponsorship, fundraising and a membership program.

### **Appropriation**

The appropriation amounts included in the operating budget for 2002-2003 are the reference levels approved by the Treasury Board following their review of the annual financial plan.

### **Expenses**

The expenses in the Operating Budget have been allocated in accordance with the priorities of the corporation as outlined in the Corporate Plan.

### Significant Commitments

The Corporation has entered into various agreements mainly for accommodation. The minimum payments under these agreements for 2002-2003 are \$2,849,000.

# Capital Budget Summary 2002-2003

The Canada Science and Technology Museum Corporation's Capital Budget for 2002–2003 is \$3,606,000. This budget is presented on the accrual basis of accounting.

(in thousands of dollars)

	2002–2003 Budget	2001–2002 Budget
EXPENDITURES		
Collection Management	\$ 75	\$ 100
Management of Public Facilities		
Science and Technology	400	400
Aviation	2,450	1,425
Agriculture	375	425
	3,225	2,250
Common Support		
Protection	150	80
Administration	140	76
	290	156
Reserve	16	50
Total expenditures	\$ 3,606	\$ 2,556

### **Assumptions**

The Capital Budget for 2002–2003 is based on the following assumptions:

### Sources of Funds

The budget is based on reference levels approved by the Treasury Board following its review of the annual financial plan.

### Expenses

The expenses in the Capital Budget have been allocated in accordance with the priorities of the Corporation as outlined in the Corporate Plan.