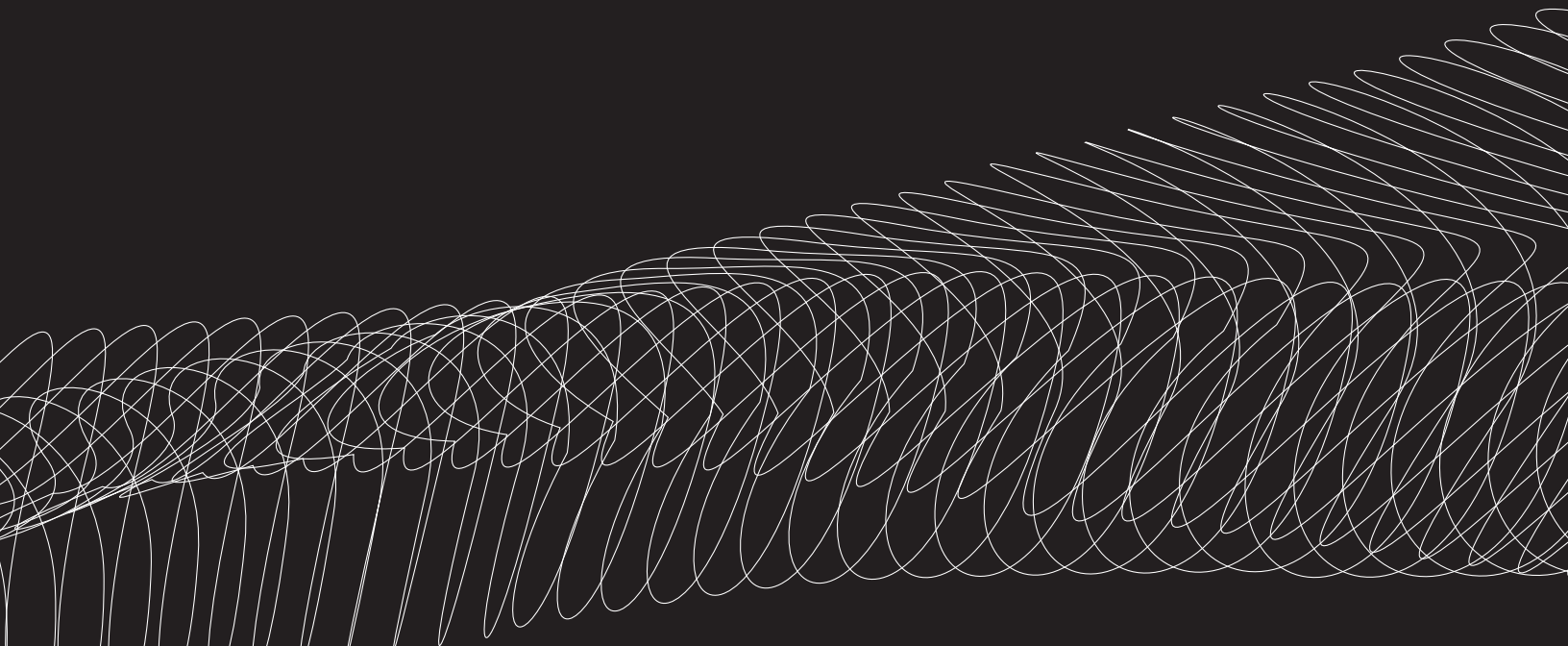


**We show how science and technology  
transform the lives of Canadians. We strive  
to be the main source of information to  
Canada and the world on the scientific and  
technological heritage of Canada.**

*And we make it exciting!*





# TABLE OF CONTENTS

<b>Board Members and Committees</b> .....	3
<b>Introduction</b> .....	4
Strategic Issues .....	4
Operational Priorities .....	6
Primary Activities .....	6
<b>Corporate Profile</b> .....	10
Mandate .....	10
Mission .....	11
<b>Environmental Scan</b> .....	12
Demographic Change .....	12
Economic Change .....	13
Social Change .....	13
Technological Change .....	13
Competition .....	14
Synopsis .....	15
<b>Strategic Issues for the Planning Period</b> .....	16
Accommodation .....	16
Canada Aviation Museum .....	16
Canada Science and Technology Museum .....	17
Reaching all Canadians .....	20
<b>Primary Activities</b> .....	26
Heritage Preservation .....	26
Research .....	26
The Collection .....	27
<i>Collection Development</i> .....	27
<i>Collection Management</i> .....	30
Sharing Knowledge .....	33
Public Facilities .....	34
<i>Canada Science and Technology Museum</i> .....	35
<i>Canada Aviation Museum</i> .....	36
<i>Canada Agriculture Museum</i> .....	38
Web Sites .....	40
Publications .....	42
Support Activities .....	43
Revenue Generation .....	43
Facilities .....	45
Informatics .....	47
Administration .....	48
<b>Financial Summary 2003–2004 to 2007–2008</b> .....	49
<b>Operating Budget Summary 2003–2004</b> .....	53
<b>Capital Budget Summary 2003–2004</b> .....	57



(as of March 2003)

# BOARD MEMBERS AND COMMITTEES

## BOARD MEMBERS

<b>CHAIRMAN</b>	Virender K. Handa
<b>VICE-CHAIRMAN</b>	Eric Lemieux
<b>MEMBERS</b>	Olga Barrat
	Gail Beck
	Jacques F. Brunelle
	Faye Dawson-Flynn
	Ron Foxcroft
	Costanzo Gabriele
	Patti Pacholek
	Joachim Simard
	Roger Soloman

## EXECUTIVE COMMITTEE

<b>CHAIRMAN</b>	Virender K. Handa
<b>MEMBERS</b>	Eric Lemieux
	Joachim Simard
	Christopher Terry

## AUDIT COMMITTEE

<b>CHAIRMAN</b>	Eric Lemieux
<b>MEMBERS</b>	Gail Beck
	Patti Pacholek
	Roger Soloman

## MAJOR FACILITIES COMMITTEE

<b>CHAIRMAN</b>	Jacques F. Brunelle
<b>MEMBERS</b>	Costanzo Gabriele
	Virender K. Handa
	Joachim Simard
	Christopher Terry

## DEVELOPMENT AND MARKETING COMMITTEE

<b>CHAIRPERSON</b>	Gail Beck
<b>MEMBERS</b>	Olga Barrat
	Faye Dawson-Flynn
	Ron Foxcroft

## CANADIAN SCIENCE AND ENGINEERING HALL OF FAME COMMITTEE

<b>CHAIRPERSON</b>	Olga Barrat
<b>MEMBERS</b>	Costanzo Gabriele
	Patti Pacholek
	Roger Soloman

**“Canada has a unique model of citizenship, based simultaneously on diversity and mutual responsibility. This model requires deliberate efforts to connect Canadians across their differences, to link them to their history, and to enable their diverse voices to participate in choosing the Canada we want.”**

**“The government will also strengthen key arts and heritage institutions and protect significant historic sites and buildings.”**

*SPEECH FROM THE THRONE, SEPTEMBER 2002*

## 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 Canadian Heritage Portfolio, the Corporation is responsible for preserving and protecting Canada’s scientific and technological heritage, and for promoting and sharing knowledge about that heritage.

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 and its three museums — the Canada Science and Technology Museum, the Canada Aviation Museum and the Canada Agriculture Museum — collectively reach in excess of two million people annually through onsite and virtual visits. Through their exhibitions, programs and Web sites, the Corporation’s 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 September 2002 Speech from the Throne, the Government of Canada emphasized the importance of strengthening the bonds of shared citizenship and creating an environment that allows for a greater understanding of the Canadian context. 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.

## STRATEGIC ISSUES

Following its consultations and discussions with management, as part of the corporate planning process, the Board of Trustees of the Canada Science and Technology Museum Corporation confirmed the three strategic issues identified in last year’s Corporate Plan as continuing priorities for the upcoming planning period:

- construction of a collection storage hangar 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.

Accommodation-related activities will be a primary focus for the Corporation over the next several years. The current and future preservation needs of the Aviation Collection will be addressed with completion of the collection storage hangar at the Canada Aviation Museum by the end of the upcoming fiscal year. With the completion of the feasibility study for a new Canada Science and Technology Museum building, the Corporation will pursue approval and funding for this important project.

The Board views universal accessibility to Canada’s scientific and technological heritage as a key ingredient in the fulfillment 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

In 2001, the federal 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

**“Heritage is our living memory. It is our collective treasure, a legacy that we have been given, and that we will leave to generations to come. It is what we care about; it is what carries a deeper meaning for all of us; it is that which enriches the present and the future of our communities.”**

*SHEILA COPPS — HERITAGE DAY MESSAGE — FEB 18, 2003*

unacceptable risk posed to the survival of aircraft which, due to their size and a lack of proper accommodation, were stored outside for many years. Selection of the professional team for this project was completed in 2002, and construction of the storage hangar and an administration/library/archives wing commenced in the spring of 2003. Inauguration of the new building is scheduled for December 2003.

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

In its 2001 announcement regarding the need for a feasibility study defining the requirements and costs for a new science and technology museum, the federal government recognized the need for a facility which would properly house and showcase Canada’s scientific and technological achievements. This decision was echoed by the Canada Science and Technology Museum Corporation Board of Trustees, which was determined to ensure that the new Museum strongly represent Canada’s innovations and achievements in science and technology. In keeping with these directions, two separate consulting teams were engaged to assist the Corporation in conducting visioning and feasibility/functionality studies intended to help define how and where the Museum should meet the needs of its audiences and stakeholders across the country. Both studies were completed within the 2002–2003 fiscal year.

### **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, collaboratively with other institutions and industry partners to maximize its use of resources, and to develop mutually beneficial results, thereby adopting the leadership role expected of a national institution.

Over the past couple of years, virtual visitors to the Corporation’s museum Web sites have increased substantially. This growth is expected to continue over the planning period, lending impetus to efforts aimed at marrying this new strategic opportunity to similar efforts by our partners in the museum and Canadian Heritage Portfolio communities, and other stakeholders. As we continue to enhance the Corporation’s electronic outreach, we are maximizing our ability to share our collections and research with audiences across Canada and around the world.

The Corporation is currently piloting an innovative program which would enable us to partner with other museums and cultural institutions across the country. In establishing such mutually beneficial affiliations, the Corporation will be enhancing its ability to address its national mandate and to share its national collection, its exhibitions, demonstrations, educational programs and its expertise. Through this “Partnership Program”, the Corporation will be able to collaborate with institutions, both large and small, bringing its collection and programs to hundreds of thousands of individuals who may never have the chance to visit the National Capital Region.

In keeping with the Prime Minister’s address during the National Summit on Innovation and Learning in November 2002 — and in conjunction with the Heritage Minister’s direction on the need for a feasibility study on a new science and technology museum facility — the Corporation has been examining ways of increasing its national presence. Based on the conclusions of this study, the Corporation is developing an explicit corporate policy and strategic direction that will address national presence while also generating strategic approaches which will further the Corporation’s contributions to an innovation-based society. This process will build upon existing partnerships with other federal agencies such as the National Research Council, and museums such as the Canadian Warplane Heritage Museum.



### OPERATIONAL PRIORITIES

In order to provide sufficient resources to help the Corporation respond to new opportunities while continuing to fulfill 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 the digitization of cultural assets, the Internet and national outreach; reorganization of the exhibition floor at the Canada Aviation Museum resulting from the removal of previously stored aircraft; public demand for new and expanded services, and growth in existing activities.

The Corporation is also facing increased pressures on existing resources — particularly staff — as a result of its two major accommodation projects: construction of the aviation artifact storage hangar, and the feasibility study for a new Canada Science and Technology Museum building. These projects require significant input from staff which, in most cases, is in addition to ongoing responsibilities.

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

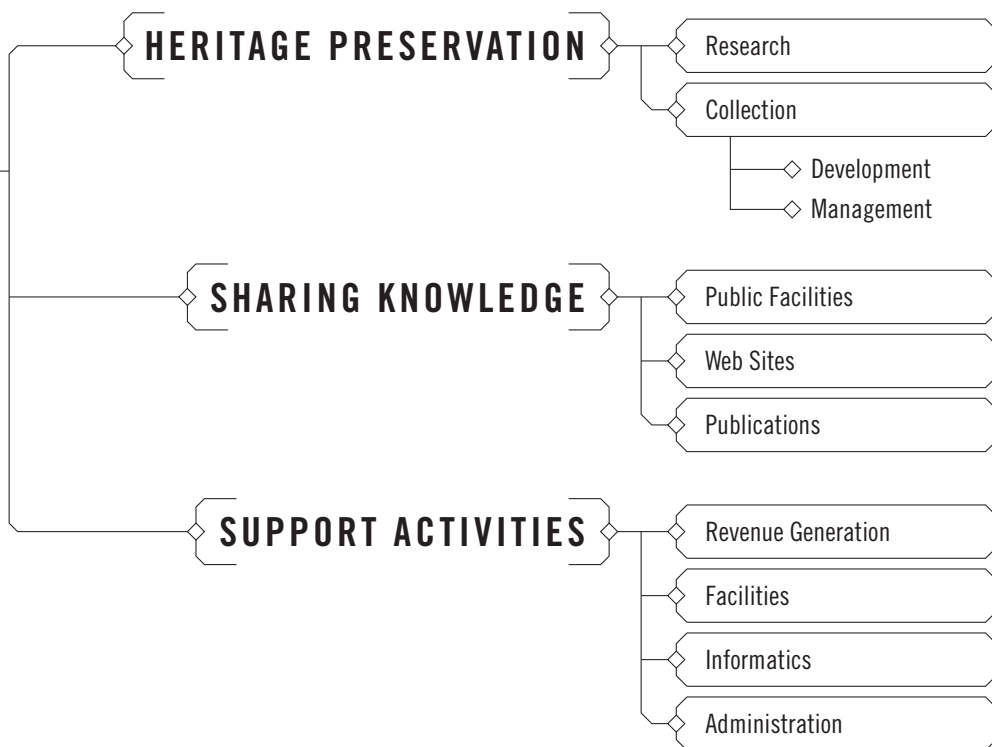
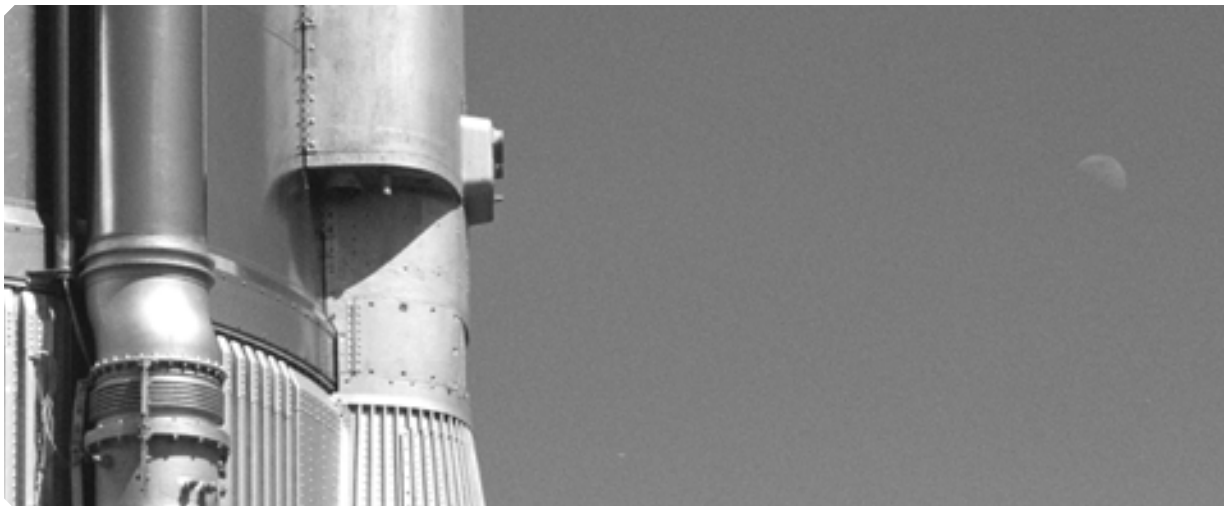
- provide for the preservation and protection of the collection;
- make its knowledge base available to a broad audience using electronic media;
- ensure a systematic renewal of its exhibitions, and the development of innovative programming to maintain its audience base;
- review its collection to ensure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





# 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.
- 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 enable the fulfilment of the Corporation's public role in providing national and international audiences secure access to corporate information resources, while facilitating internal business practices.
- d) Administration Objective**  
To provide effective and efficient services within a framework of appropriate management control.

## STRATEGIES

## MAIN ACTIVITIES

- 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, interpretive programming and Web presentations.

Historical research.

- 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.

Collection assessments, cataloguing, conservation, collection storage.

- Develop exhibitions and programs guided by the “Transformation of Canada” theme.
- Maintain a plan for the systematic renewal of exhibitions.
- Develop collaborative partnerships to maximize exhibition and programming development opportunities.
- Monitor and evaluate the Museums’ audiences and the visitor’s museum experiences, in order to make informed decisions.

Exhibitions, interpretation activities, school programs, artifact loans.

- 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.
- Promote the Corporation’s museums and services to a wider and more clearly defined audience.
- Develop collaborative partnerships to maximize Web development.

Data/content management, digitization of assets, Web product development.

- 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).

Publication of research results.

- 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.

Cost recoveries, commercial operations, e-commerce and corporate development activities.

- 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.

Management of facilities and leases.

- 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 establishing and maintaining strategic relationships with appropriate partners and providers.

Maintenance of information technology (IT) and Web site infrastructure, support for information technology needs, provision of IT security.

- 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.

Human resources, financial management, administrative services.

**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.**

CANADA SCIENCE AND TECHNOLOGY MUSEUM CORPORATION — MANDATE

## 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 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 11 members, including the Chair and Vice-Chair, and is supported by five committees: an Executive Committee, an Audit Committee, a Development and Marketing Committee, a Major Facilities Committee, and a Canadian Science and Engineering Hall of Fame Committee. The Corporation's day-to-day operations are managed by the President and Chief Executive Officer, with support from a management team which includes the Directors General of each of the three museums, and the Executive Directors of Museum Services, Finance and Administration, Human Resources, Corporate Development, Corporate Planning and Major Capital Projects (see Table 1). The Corporation receives an annual appropriation which it supplements through revenue generating activities.

The Corporation is ultimately accountable to Parliament, through the Minister of Canadian Heritage. The Corporation is part of the Canadian Heritage Portfolio, which is comprised of 21 cultural and heritage organizations, including the Department of Canadian Heritage, seven departmental agencies (such as the National Archives and the National Film Board) and ten Crown corporations (including the Canadian Broadcasting Corporation and the National Arts Centre).

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 undertakes curatorial work and sets its own public programming activities and strategies, in recognition of the different markets and clientele it serves. The three museums operate under a common set of corporate policies. Support services such as human resources, finance and facilities management are provided centrally.

The Corporation's workforce consists of 250 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.

**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.**

CANADA SCIENCE AND TECHNOLOGY MUSEUM CORPORATION — MISSION

## 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.

TABLE 1

## CANADA SCIENCE AND TECHNOLOGY MUSEUM CORPORATION





## ENVIRONMENTAL SCAN



Over the past year, the Corporation enhanced its assessment of the environment in which it operates by inviting input from staff across the organization. This scanning process aims at a systematic review of changes — in the economy, in society, among competitors, and in government — which could have an impact on the Corporation's museums. This scan looks three to five years into the future, although a more distant horizon is sometimes required in order to identify more gradual trends. Although staff opinions varied on details, there was a surprising level of agreement on the major issues to be considered during the strategic planning process.

These issues ranged from the basic conditions underlying any organization's planning concerns — such as demographic change — to more particular aspects of museum operation within the National Capital Region. While rapidly changing trends were felt to require the most immediate attention, the interaction between various issues brought its own set of compelling concerns.

### DEMOGRAPHIC CHANGE

At the most fundamental level, demographic change is an inexorable force, affecting social, economic and political issues, as well as local market opportunities. At the turn of the twenty-first century, Canada is characterized by the concerns of the Baby Boom generation which, like the Silent and GI generations which came before, exerts a marked influence on the world around it. Boomers and their children — Boom Echo or Generation Y — have powered the growth of museums and museum audiences over the past three decades. As the early Boomers' children entered their teen years in 1980, the growth in family visitation to museums began to wane. However, later Boomers' children kept visitation strong into the twenty-first century. In 2002, this market is beginning to evaporate, as these children enter young driver training. By 2020, this family visitation boom will have ended entirely.



However, other visiting groups will take their place. Museums will still be popular. The Boom Echo's offspring will spawn a population blip of their own, even if their families will not be large enough to stem an overall population decline. The generation that followed the Boomers, Generation X, will not contribute greatly to the population — partly because of their smaller numbers, and partly as a consequence of living in the shadow of a much larger cohort. With the polarization of incomes, many have not been able to garner sufficient family income to support families. Indeed, some are still living with their parents. This will officially begin to change in 2012, when early Boomers begin to retire at 65; however, the last ones won't step aside until 2032, when the oldest Gen-Xers are in their fifties.

Across the world, changing social values, economies, and technologies have led to a decline in birthrates. Demographers predict this will cause the world population to peak in mid-century at about 7.5 billion people, followed by a decline that will reduce it again to present values another 50 years later. In Canada, the estimated peak will be 37 million, and the decline will begin a decade earlier than elsewhere in the world. This is contrary to the once widely-held view that the human population is out of control and will overrun the world until the exhausted planet can no longer support life. Governments are awakening to the fact that it is the third child that keeps the human race going, and unless they institute programs to help young families grow, they will be presiding over a dwindling citizenry. Urban institutions like museums, which rely on large numbers of local families, are likely to continue to lose ground against the tide of demographic change.

Organizations will need to identify the size and growth-potential of specific demographic groups, then pursue market penetration in these subgroups on a priority basis. Lifestyle, leisure time, discretionary income, and parenting responsibilities are not the same across the five generations living today, and museum programs should take this into account. Although the Boom generation will be with us for some time yet, particularly in the September empty-nester tourism rush, their interests



in museums will be different. Appealing to different generations within the same museum building may present certain challenges in meeting conflicting interests.

#### ECONOMIC CHANGE

Growth-based economic theories would obviously be endangered by a lack of continued growth in the world's population, and there is bound to be some scrambling on the economic front to find programs that can stimulate and sustain wealth creation. However, economic forecasts, like hats, come in all sizes, and it is not at all certain what the future will bring. The upcoming demographic shift has many economists predicting a worldwide recession within the next few decades. Most governments, like Canada's, will likely tread a fine line between programs designed to stimulate economic growth and those aimed at controlling inflation and the deficit. Government spending will likely fluctuate to maintain this balance in a changing world. It seems safest to predict that the economy will become more variable, with opportunities for enterprises that can move quickly to exploit them, but disaster for those who cannot adapt.

The local economy has seen its own share of volatility, with the bursting of the high-tech/dot-com bubble. The most immediate effects will be reduced household income, and some population loss from the region. The west end of Ottawa was hit particularly hard, but since the Corporation's museums never had much penetration in this region, the overall impact will probably be slight. In the longer term, the crash may evoke a less positive view of science and technology in the public mind. Certainly, exhibitions which tout the Internet as the hope of the future will be met with some scepticism today. These events provide a compelling case history on the role of science and technology in society, and might prove a good exhibition subject — even disaster may present opportunities.

#### SOCIAL CHANGE

Despite this volatility, Canada is still seen as a good place for those with financial capital or skills, so immigration will continue to be an antidote to the drop in Canada's birthrate. Urban areas will continue to see an influx of immigrants. Currently, about 7% of adults visiting our museums have neither English nor French as their first language. This represents half of those found in the area population. A good many of them have come from European countries in the past, but recent immigrants are more likely to be non-European. Assuming this trend continues, the cultural background of potential visitors may be very different from what museum staff are used to. Although it is oversimplifying to lump all non-European visitors together, this grouping has shown slight but statistically significant differences in their responses to ongoing visitor surveys. They tended to visit more in family-only groups, and as a result of a recommendation from a local resident. More disturbing is that they rated the museums as lacking in adequate lighting, while also being harder to understand, with less knowledgeable and courteous staff, than did English or French native speakers. When asked whether science, technology, history, agriculture or aviation have some particular personal connection or interest for them, non-Europeans tended to choose "other". Do the recent immigrants not visiting our museums hold even more different views? Clearly, museums need to find out what new Canadians know and think about science, technology and culture. This knowledge must then be integrated into a new science and technology history that has more relevance to new Canadians.

#### TECHNOLOGICAL CHANGE

If the demographic, social and political forecasts seem less than ideal, then the technological outlook is seen as remarkably sunny. The more the world of science and technology changes, the better for science and technology museums. Public interest should remain high as developments in medicine affect our lives, and breakthroughs in the physical sciences affect how we view the universe. On controversial



issues such as genetically-modified foods or aviation safety, the Corporation's museums can play an intermediary role as objective observers and trusted reporters of technological issues.

Museums have always had real objects as their strength, and despite the growth of the Internet, it was felt that Web-surfing will not hurt museum visitation any more than it already has. In fact, the dissemination power of the Internet was seen as a solution to museums' perennial outreach problem.

#### COMPETITION

Although local residents mention around 60 activities in which families can "have fun and learn something at the same time", the seven large museums in the National Capital Region command the lion's share of attention, with 80% of residents visiting museums regularly. On average, these people visit museums just under four times per year. Clearly, there are more than enough museums to go around. That many museums target the same family segment just adds to the congestion.

However, because museums are characterized by their general subject matter, there is usually strong product differentiation along this line. Some long-time residents may still be confused by the historic development of museums in the region — referring to the Museum of Man, for example — but most people know that to see aircraft, one goes to the Aviation Museum at Rockcliffe, and that one goes to the "castle" to see dinosaurs. This degree of differentiation is good for the museums, in that each gets its proper audience. Occasionally a museum will expand its topic reach to include subject areas which are the natural purview of another institution. This generally hasn't worked with local audiences, but remains an area of concern.

For the tourist segment and Canadians at large, the location, building and public programming of the Canadian Museum of Civilization (CMC) make it a leader within the local museum community. Fourteen percent of Canadians think of it first when asked about museums in the National

Capital Region. Combined with results from its affiliate museum, Canadian War Museum, the CMC Corporation scores 19%. The total for the Canada Science and Technology Museum Corporation (CSTMC) is 13%. Because of the cost, most national museums do not engage in major national advertising campaigns, usually relying on media relations and public service announcements. This will probably change with the opening of the new Canadian War Museum, and the development of a new Canada Science and Technology Museum (CSTM). In the end, the fiercest competition may well be for the awareness of Canadians.

Overall, the exhibition offerings among local museums are aging, with some becoming virtually permanent displays. Inevitably, local residents have seen them so often they have lost interest. Museums use temporary and travelling exhibits to freshen up their galleries, but this requires genuinely new subject matter, and advertising dollars to inform the public in advance. Except for National Gallery blockbusters and new IMAX shows, communication follows the exhibition pattern, with fairly stable advertising expenditures. The CMC has somewhat higher top-of-mind awareness, although the CSTMC's total share is about equal to that of the CMCC, with around half of area residents recalling a recent ad campaign.

Location was historically not a variable in the museum marketing mix. Indeed, all of Canada's National Museum was once housed in the Victoria Memorial Museum Building on Metcalfe Street, where dinosaurs rubbed shoulders with fine art. Over the years, however, museums worked their way downtown, or out into the surrounding regions. At the city core, tourism became a major source of visitors, while suburban museums served their local populations and their visiting friends and relatives. It seems that non-central museums do not benefit substantially from population growth in more distant neighbourhoods, although municipal amalgamation does promise better public transport systems and roadways.





Although there is some minor price differentiation among area museums, with the CMC being the most expensive and the CSTMC being, on average, the least expensive, area museums wisely don't compete vigorously on price because it hasn't been a driving factor in museum visitation. The economic downturn, wage polarization, and the conversion of workers to retirees may change this. Although CSTM visitor surveys since 1991 show fairly steady satisfaction with price, we do not have comparable figures for non-visitors or ex-visitors. Recent qualitative market research has elicited comments about the cost of a museum visit. Price sensitivity in current or potential visitors may increase in the near future. There is also some indication from focus groups that the public is interested in a museum passport which would be valid at all museums in the region.

A new CSTM would certainly challenge the status quo. Depending upon its location and design, it is poised to become one of the region's most popular attractions. The opening of two new museums in the region (the CSTM and the CWM, scheduled to open in 2005), combined with the ongoing popularity of the region's other national museums, will lead to greater competition within the museum sector for the local tourism market. Area museums may ultimately realize that it would be more beneficial to increase the size of the market itself, through joint efforts aimed at promoting Ottawa-Gatineau as an international destination. The CSTMC could become a key player in any such co-location strategy.

## SYNOPSIS

How do the environmental trends discussed above affect the Corporation's future, how will this affect its museums, and what should be done? As with all predictions, the more specific one gets, the less confident one can be. The cultural policies implicit in the Speech From The Throne,

and those made explicit by the Department of Canadian Heritage, are the most significant factors affecting the Corporation's future. Most of the major environmental issues the Corporation faces are addressed in recent federal government policy. However, the Corporation does require additional funding to respond appropriately to these policy initiatives. If resources are made available, then the Corporation can play a greater part in the future envisioned by the Speech From The Throne. It is key that the CSTMC communicate to government the role it can play in achieving this vision.

Economic change is certain. Although we may seem to be insulated from this to a certain extent, the Corporation's clients are not. Consumers, sponsors and partners, and government budgets are all affected. The Corporation needs to be aware of their situation and needs.

Competitive factors will increase, perhaps eliciting short-term responses, but the best way to address them is through long-term plans that match new, on-brand products with promising target segments. Larger returns may be possible if the Corporation lends its strengths to cooperative efforts with Canadian Heritage Portfolio organizations to expand the market.

Demographic change continues to affect attendance, and the pace of this will speed up as a result of lifestyle changes related to the Baby Boom. Similarly, social change from immigration will require adjustment of museum programming in the very near future, and new historical and museological research to develop a more encompassing view of Canadian material history. The long lead time for this means it must start soon.

As the world of science and technology changes, the Corporation's museums can respond to public interest in new developments, and can play a role as objective observers on scientific and technological issues. New technologies also provide the Corporation with opportunities for new content and new dissemination tools.



# STRATEGIC ISSUES FOR THE PLANNING PERIOD



## ACCOMMODATION

### Canada Aviation Museum

In 2001, funding was provided to construct a collection storage hangar at the Museum's Rockcliffe site. The new hangar will be situated to the south of the current structure, and will accommodate the seven aircraft stored outdoors, most of those held in open storage, all the aircraft that the Museum anticipates acquiring over the next 10 to 15 years, and any aircraft returning from loans to other museums. This storage building is part of a second phase of construction, as foreseen in the 1992 site development plan for the Museum. At the same time, an addition is being constructed on the north side of the Museum building to accommodate administration, library and archives services.

The Corporation prepared a functional program to outline its accommodation requirements for the new hangar and administrative/library/archives area, and to define the environmental controls required to meet the aviation collection's long-term preservation needs. The functional program also defined the needs of other building components, in the context of an update to the overall 1992 site development plan. These include a visitor services entrance, a pedestrian link connecting the new facility to the Museum, a storage area for small artifacts, a conservation shop, a new auditorium and boutique, and an improved main entrance.

Architectural and engineering services for the design and construction of the entire project were obtained through a competitive selection process. The Corporation announced its team of professionals, formed from the highest-rated firms in each discipline, on November 7, 2002. The successful architectural firm — the ARCOP Group, in conjunction with Cardinal Hardy and Associates — is the coordinating consultant.

This team of professional consultants has developed a conceptual design for the entire project, in accordance with requirements outlined in the functional program. Revisions to the long-term site development plan and the conceptual design for the new storage hangar required three presentations to the NCC, in order to obtain the approvals necessary to proceed to the detailed design phase.

The professional team then completed a detailed design for the new spaces, and prepared a cost estimate for the building of all facilities included in the long-term plan. The airplane storage facility, the library, the archives and the administrative offices have been funded, and construction commenced in Spring 2003. A phased construction plan, complete with accurate cost estimates, is now in place to build all the new and as yet unfunded facilities mentioned above, as funding becomes available.

In the conceptual design presented to the Corporation and approved by the NCC, the pedestrian link between the new and existing buildings was placed underground, and was enlarged to incorporate display space and storage for small artifacts. This approach adds considerably to the functionality of the Museum complex by enabling controlled public access to the storage wing through the Museum building, and allowing viewing of artifacts. The dynamic nature of the planning process led to an appreciation of the fact that any delay in the construction of this element would entail significant additional cost and severely limit access to the storage wing. Accordingly, funding is being sought to include this link in the construction now underway. The new storage hangar also has a direct impact on the urban design and landscaping of the site,



and magnifies the deficiencies of existing landscaping. This was never properly funded, and has created some disorientation for visitors since the new Museum building first opened in 1988. The access road and parking lot, groundcover and vegetation must be modified in order to suit the new facilities, to improve the Museum's visibility from the Parkway, and to provide for a more coherent entry portal. Funds are therefore also being sought to implement this requirement. Construction of the other elements of the project — namely, additional artifact storage, the conservation shop, a redesigned visitor entrance, boutique and auditorium, and an improved main entrance — will be deferred until funding becomes available.

Because of the fast-track method used by the Corporation on this project, working drawings and specifications are being developed by the professional team on an ongoing basis throughout the design and construction phase. Up to 75 tender packages will be issued to complete construction of the storage hangar and administrative/library/archives area. The Museum has pre-qualified firms in 17 major trades, and will invite these to submit quotes on the tender packages. The professional team will be providing inspection services throughout 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 requirements outlined in the functional program. It also establishes the operations and maintenance program, and a preventive maintenance program for the ongoing management of the property.

The inauguration of the new collection storage hangar is scheduled to take place in December 2003, to commemorate the centenary of the flight of the Wright Brothers. The first major activity in the new hangar

will be the refinishing of an Avro Lancaster bomber. This aircraft, which is currently housed in the Museum building, will be cleaned and repainted in its correct markings before it is returned to the Museum for display. Following this, the part of the collection to be housed in the new building will be moved in. The major steps for this project over the planning period are outlined below:

FINALIZE AND ANNOUNCE CONSULTANT SELECTION	Nov. 7, 2002
CONCEPTUAL DESIGN COMPLETED	Feb. 15, 2003
DRAWINGS AND SPECIFICATIONS STARTED/ONGOING	Feb. 28, 2003
ISSUING OF TENDER PACKAGES STARTED/ONGOING	Feb. 28, 2003
AWARDING OF CONTRACTS STARTED/ONGOING	Mar. 1, 2003
SUBSTANTIAL CONSTRUCTION COMPLETED	Dec. 1, 2003
<b>INAUGURATION</b>	Dec. 17, 2003

### Canada Science and Technology Museum

The Museum has been situated at its present location — a site on St. Laurent Blvd. in an industrial park — since 1967. The original building was constructed in 1964 as a warehouse-grade structure for use as a bakery distribution centre. It is now almost 40 years old, and close to the end of its originally anticipated life. The site and building have been gradually adapted to museum use over the years, but as the situation was meant to be temporary, any investments made have tended to deal more with the safety and the structural integrity of the building, than with the development of museum amenities or 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 a more serious earthquake within the range to be expected in the National Capital Region. The study recommended a variety of capital improvements totalling \$1.7 million over a five-year period, in order to raise the building to a reasonable standard of safety and environmental control. In May 2001, the Government of Canada recognized the necessity of dealing with the Canada Science and Technology Museum's inadequate building and announced that a feasibility study would be undertaken by the Corporation to define the needs and costs of a new facility.

The feasibility project initiated in October 2001 was completed by February 2003. The study provided in-depth information, and generated a host of ideas for the vision and implementation of a new Canada Science and Technology Museum and the demographic segments it will serve in the future. The project was initiated by a Visioning Study contracted to Lundholm Associates Architects, N.L. Hushion and Associates, and Leger Marketing. The consultants' approach was to divide the study into three phases. Phase One looked at Vision Options by identifying the key issues and broad options which would give direction to the study and define areas requiring further research. Phase Two, Research and Concept Development, incorporated in-house study groups to develop the conceptual thinking for collections, exhibitions and programs. This was followed by a market analysis, stakeholder consultations and case study research, leading to the final phase of the study. Phase Three, Synthesis of the Vision, applied the results of the first stages in articulating the Museum's future direction. Key to this vision is a proposed new vision statement for the Museum: *We explore, with all Canadians, the rich connections between science, technology, society and culture: an essential step in our understanding of ourselves and the world.*

The study took the following into consideration: demographics and programming variables, questions of current size and projected growth, range and emphases of programs — e.g., broad thematic exhibitions as well as technology-specific ones, children's areas, increased interactive exhibitions directed at understanding science, current issue-oriented exhibitions — and, as far as possible, full access to the collection. Collection facilities and opportunities to demonstrate elements of the collection such as rail, land and marine objects were a major aspect of the studies, especially since they can have such a profound effect on visitor attendance. In addition, it addressed the types of spaces required. Commercial opportunities, rental facilities, evening access for conferences, facility rentals, dining, entertainment and a multimedia experience were considered as well. Also included was the concept of developing a centre which will become a site of first contact for Canadians wishing to access or discuss issues related to science and technology.

The feasibility study, undertaken by Provencher Roy + Associés Architects and the ARCOP Group, required the generation of a great amount of basic information, as well as an assessment of current facilities. It included development of a weighted evaluation grid for such aspects as live rail, proximity of collection, commercial operations, total floor space, adjacencies, sustainable design, exhibition space, theatre space, and a "Big Ticket" attraction. Some of these criteria, such as access to live rail and the ability to attract visitors, had an obvious impact on site selection. The studies defined the needs of the Museum



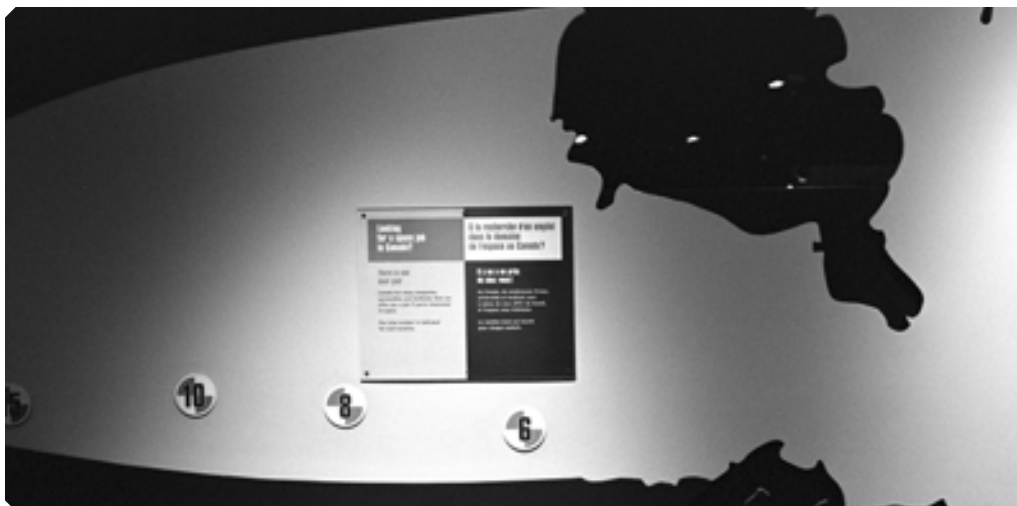
and of its collection, as well as public programs and the image of a national museum designed to meet the needs of all Canadians. Finally, the studies looked at optimum size and location. The final functional program will be a key document for the selected architect.

While not part of the studies proper, a Summer Design Studio organized by Carleton University's Department of Architecture used a new CSTM building as a case study for architecture students. A number of scale and electronic models were an outgrowth of this challenge, and resulted in a number of interesting concepts and approaches. The models were on display in the museum lobby for a number of months and generated both public and media interest.

A major consideration is ensuring that the design reflects the type of building which would best suit Canada's national science and technology museum. A signature building should be unique, state-of-the-art, and groundbreaking, as opposed to a basic structure built to a standard template using standard materials. Sustainable technology used in any building of this sort sets an example for Canadians and a new international standard for the future. The museum would thus lead by example and be an emblem of sustainable technology which, while initially more expensive, should cost less to operate in the long run. With a signature building, the return on investment (ROI) is faster through tourism: building and content would become an international attraction (e.g., the Guggenheim in Bilbao, Spain repaid its initial investment through tourism within three years). A signature building would, as the Guggenheim Museum did for Bilbao, Spain, enhance Ottawa's position as a "must-see" on the world map.

Given sufficient funds, the identified tasks to be undertaken during this fiscal period are:

Development of an interpretation framework and implementation strategy.
Development of a program framework and implementation strategy.
Development of an outreach framework and implementation strategy.
Development of a framework and implementation strategy for the Research Centre.
Feasibility assessment and recommendations for a multimedia attraction/conference centre.
Feasibility and costing assessment of incorporating the "Museum Exhibit Guide" (developed by Experience Music Project, Seattle).
Geotechnic and environmental testing of available high-potential sites.
Site surveys (easements, elevations, etc.) of same.
Traffic circulation and access options of available high-potential sites.
Development of cost estimate and strategic framework for conservation recording and moving collection plus shelving replacement cost.
Appraisal of existing CSTM building and land value.



## REACHING ALL CANADIANS

As a national institution, the Corporation plays an important role in fulfilling the federal government's objectives of strengthening the bonds of shared citizenship and creating an environment that allows for a greater understanding of the Canadian context. The Corporation endeavours to foster, on the part of all Canadians, an understanding of their scientific and technological heritage and a sense of pride in Canada. Through exhibitions, innovative programming, Web sites and publications, the Corporation strives to increase accessibility to, and awareness of, this knowledge base. Traditionally, outreach activities have proven costly, due primarily to the constraints of distance, population dispersal, and time zones. 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:

**COLLABORATION AND PARTNERSHIP** — the Corporation has initiated a number of collaborative initiatives and partnerships in the recent past with organizations within the Canadian Heritage Portfolio, as well as with similar subject-based institutions, and anticipates these developing into effective working relationships on behalf of the public and the partners.

• **NATIONAL MUSEUMS** — the Corporation is collaborating with the other national museums on a number of initiatives.

- i) **NATIONAL CAPITAL REGION VISITOR SURVEY CONSORTIUM** — in light of the strategic directions of the federal government, it behooves area museums to see themselves in a national context. Instead of competing for a diminishing share of local family visits, area museums need to turn their focus to the sea of national and international cultural tourism that will characterize the coming decades. New museum buildings may provide the infrastructure, but it will be the exhibitions, programs and services that make Canada's capital a world-class destination. Developing these offerings for a changing world is the major challenge facing museums.

As the National Capital's cultural opportunities grow and diversify, the potential for inter-agency cooperation also increases. Information-sharing, thoughtfully implemented, can be one such type of cooperation. Performance indicators gathered by individual museums provide them with a glimpse into potential issues for improvement and excellence. However intriguing such data seems at first glance, real knowledge and insight about the visitor experience becomes available only when such factors are put into context.

Recognizing this need, representatives from the marketing, evaluation, audit and visitor research functions of the Canada Science and Technology Museum Corporation, the Canadian Museum of Civilization Corporation, the National Gallery of Canada, the Canadian Museum of Nature, the National Capital Commission, the Library of Parliament, Rideau Hall, and the Royal Canadian Mint, are discussing a framework for cooperation in information-sharing. Visitor satisfaction and market audience characteristics are of interest to all museums, so this need was tackled first. Key concerns included standards for demographic variables and satisfaction questionnaires, confidentiality, reporting, and cost-effectiveness. If successful, a consortium of public agencies will contract a private supplier for fieldwork, analysis and reporting and, most importantly, storage of the combined survey data. It is envisioned that consortium partners will be able to compare their own individual survey results to the aggregate data from all partners, thereby enabling them to better judge their own performance against the market average. As the

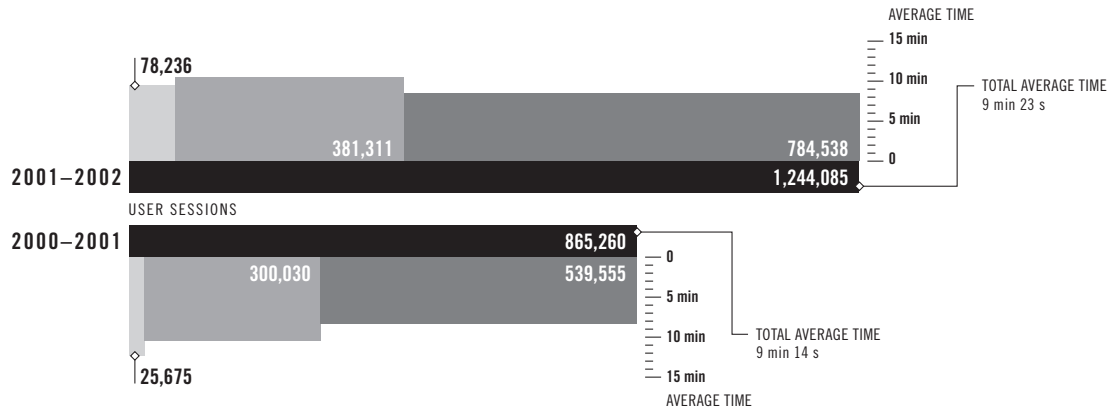


three largest national museum corporations currently use the same computerized survey system, this will provide the nucleus for gathering data. Smaller institutions will be invited to participate, and over the years, a more complete picture of the cultural tourism market of the National Capital Region will emerge.

- ii) **MUSEUM PASSPORT** — in concert with the other national museum corporations and the National Capital Commission, the Corporation is pursuing a concept for a museum passport which would provide discounted admission to participating institutions.
- iii) **MUSEUM VOUCHER PROGRAM** — the Corporation is also a partner with the other national museums in a Museum Voucher Program administered by Reservation Outaouais, which targets the tourist market.
- iv) **PROGRAMS AND EXHIBITIONS** — the Corporation will continue to participate with the other national museums in the celebration of International Museums Day. Several exhibition proposals will be pursued with the other national museums, and artifact loans will also continue whenever possible.
- v) **SHARING EXPERTISE** — expertise will continue to be shared in areas such as major building projects, curatorial advice, communications and marketing, and human resources. An agreement initiated in February 2000 between the federal cultural institutions to share expertise, facilities and equipment during an emergency will continue to apply.

- **CANADIAN HERITAGE PORTFOLIO** — as part of the Canadian Heritage Portfolio, the Corporation participates with agencies and Crown corporations such as the CBC, the National Film Board, the National Archives, the Canadian Heritage Information Network, the Canadian Conservation Institute and the National Capital Commission in exhibition and programming endeavours. Participation in the policy cluster groups — created by the Department of Canadian Heritage to provide an integrated Portfolio approach to policy issues — is expected to continue. To date, the Corporation has been involved in the History/Heritage and Outreach clusters.
- **OTHER GOVERNMENT DEPARTMENTS/AGENCIES** — a Memorandum of Understanding (MOU) with the National Research Council of Canada (NRC) was finalized this past year, and similar MOUs with the Canadian Space Agency (CSA) and the Canadian Conservation Institute (CCI) should be completed during the upcoming fiscal year. These agreements 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 and Canada. Exhibition projects are being discussed with the RCMP, the Canadian Institute of Health Research, Transport Canada, Natural Resources Canada, Environment Canada, Agriculture and Agri-Food Canada, and National Defence.
- **MUSEUM COMMUNITY** — the Corporation continues to work with the Canadian Museum of Civilization (Gatineau), Ontario Science Centre (Toronto), Science World (Vancouver), Centre des sciences de Montréal (Montréal), La Cité (Paris) and the Department of Foreign Affairs and International Trade, in partnership on the exhibition **Canada and Modernity**. Contributions of content, inspired by the **Innovation Canada** exhibition and drawn from our rich collection of artifacts, are being explored. **Canada and Modernity**, scheduled to open in Paris in November 2003, is envisaged to include smaller-scale exhibitions and programs, opening simultaneously at partner institutions across Canada.

## WEB SITE VISITORS — 2000–2001 vs. 2001–2002



- Canada Agriculture Museum ([www.agriculture.technomuses.ca](http://www.agriculture.technomuses.ca))
- Canada Aviation Museum ([www.aviation.technomuses.ca](http://www.aviation.technomuses.ca))
- Canada Science and Technology Museum ([www.sciencetech.technomuses.ca](http://www.sciencetech.technomuses.ca))

**INTERNET** — a dramatic growth in Internet use offers the Corporation an exciting opportunity for facilitating public access to its products. Over the past two years, the Corporation and its three museums have noted a continuing trend in which virtual visits outnumber onsite attendance. It is anticipated that the number of visitors to our Web sites will continue to increase, lending impetus to efforts designed to capitalize on demonstrated public interest in our offerings. The Corporation will also look at the many ways in which it can marry 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 given to the development and enhancement of products for the Web sites and content for networks such as SchoolNet.

**PUBLIC FACILITIES** — the Corporation's museums continue to be a primary means of making its collection and programs accessible to Canadians. Some 750,000 onsite visits are recorded annually, with 50% of these visits by people living outside the metropolitan Ottawa-Gatineau region.

**AFFILIATE MUSEUMS** — as a means of extending its outreach program, the Corporation is piloting an innovative program which would enable the Corporation to partner with other museums and cultural institutions across the country. In establishing such mutually beneficial affiliations, the Corporation will be enhancing its ability to address its national mandate and to share its national collection, exhibitions, demonstrations, educational programs and expertise. Through this "Partnership Program", the Corporation will be able to collaborate with institutions, both large and small, bringing its collections and programs to hundreds of thousands of individuals who might never have an opportunity to visit the National Capital Region.

**NATIONAL REGISTRY** — the Corporation is actively working on the development of a National Registry of Significant Artifacts in Science and Technology, in conjunction with its collection development process. Collection assessment work in all of the major subject areas will result in a description of the ideal artifact collection to represent and illustrate each of the Corporation's major subject areas. Building on this essential work, the Canada Science and Technology Museum will lead a national initiative to establish a criteria and selection committee aimed at identifying and recognizing artifacts of national significance for inclusion in this registry, no matter who holds them. This important undertaking will be accomplished through extensive negotiations and cooperation with public institutions across Canada. Portfolio partners in this effort include: Parks Canada, the Canadian Conservation Institute, the National Archives and the National Library, and the other national museums. The registry will serve to increase the recognition and profile of Canada's scientific and technological heritage, while greatly enhancing and facilitating its preservation, interpretation and access.

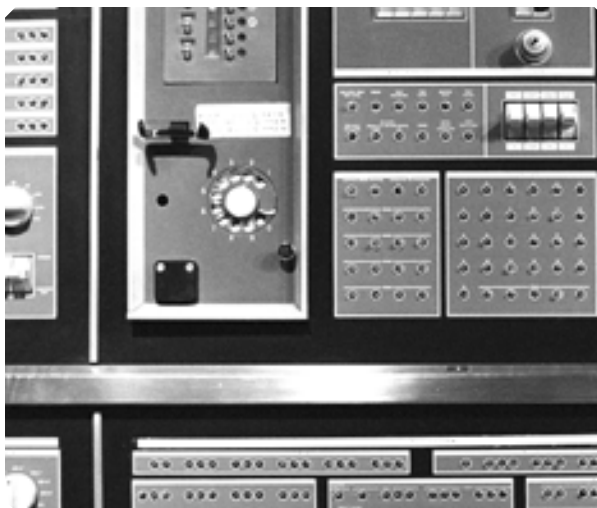
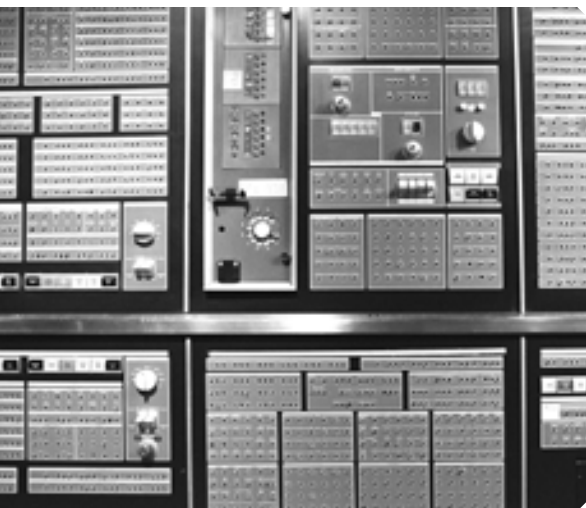
**COLLECTION INFORMATION** — information on the collection will be offered to Canadians through various means of dissemination. Publications on the artifacts in the collection — e.g., *Collection Profile*, *Curator's Choice* and *A Closer Look* — will be provided to the general public in both electronic format and, where appropriate, in printed format.



TABLE 2

## ARTIFACT LOANS DISTRIBUTION

NATIONAL	NUMBER	LOCATION	INSTITUTION	NUMBER
Alberta	6	Alberta	Calgary Aviation Aerospace Museum	2
British Columbia	9		Reynolds Alberta Museum	4
Manitoba	4	British Columbia	British Columbia Railway Museum	1
New Brunswick	20		EMR Pacific Geoscience Centre	1
Newfoundland	2		Interior Space & Science Centre	4
Northwest Territories	3		Vancouver Art Gallery	2
Nova Scotia	9		Vancouver Maritime Museum	1
Ontario	230	Manitoba	Western Canada Aviation Museum	4
Quebec	165	New Brunswick	New Brunswick Museum	20
Yukon	1	Newfoundland and Labrador	Marine Atlantic	1
<b>TOTAL</b>	<b>449</b>		Southwest Coast Historical Society Museum	1
		Northwest Territories	Norman Wells Historical Centre	1
			Prince of Wales Northern Heritage Centre	2
		Nova Scotia	Atlantic Canada Aviation Museum	5
			Greenwood Military Aviation Museum	3
			Shearwater Aviation Museum	1
		Ontario	Agriculture and Agri-food Canada	7
			Air Canada	35
			CFB Borden Military Museum	9
			CBC Broadcast Museum	11
			Canadian Warplane Heritage	14
			Canadian War Museum	6
			Communications Research Centre	14
			David Florida Laboratory	12
			Kingston Marine Museum	2
			Measurement Canada	50
			Meteorological Services Canada	4
			Michipicoten Museum Society	1
			Mississippi Valley Textile Museum	12
			Muskoka Heritage Place	8
			National Capital Airshow Association	8
			National Capital Commission	3
			National Defence	26
			Ontario Bushplane Heritage	2
			Parks Canada	1
			RCAF Memorial Museum	1
			Rideau Canal Museum	1
			Royal Ontario Museum	6
			Canadian Coast Guard	1
			University of Waterloo	1
			West Parry Sound District Museum	5
		Quebec	Canadian Centre for Architecture	3
			Canadian Museum of Civilization	15
			Canadian Postal Museum	52
			Centre d'histoire de Montréal	1
			Musée d'aviation de Lac à La Tortue	17
			Musée de la mer de Pointe-au-père	4
			Musée des Phares et Balises	3
			Musée Maritime Bernier	1
			Musée minière de Thetford Mines	6
			Ports Canada Port de Montreal	2
			Public Works & Government Services Canada	59
			Société Vieux Port de Montréal	2
		Yukon	Northern Lights Centre	1

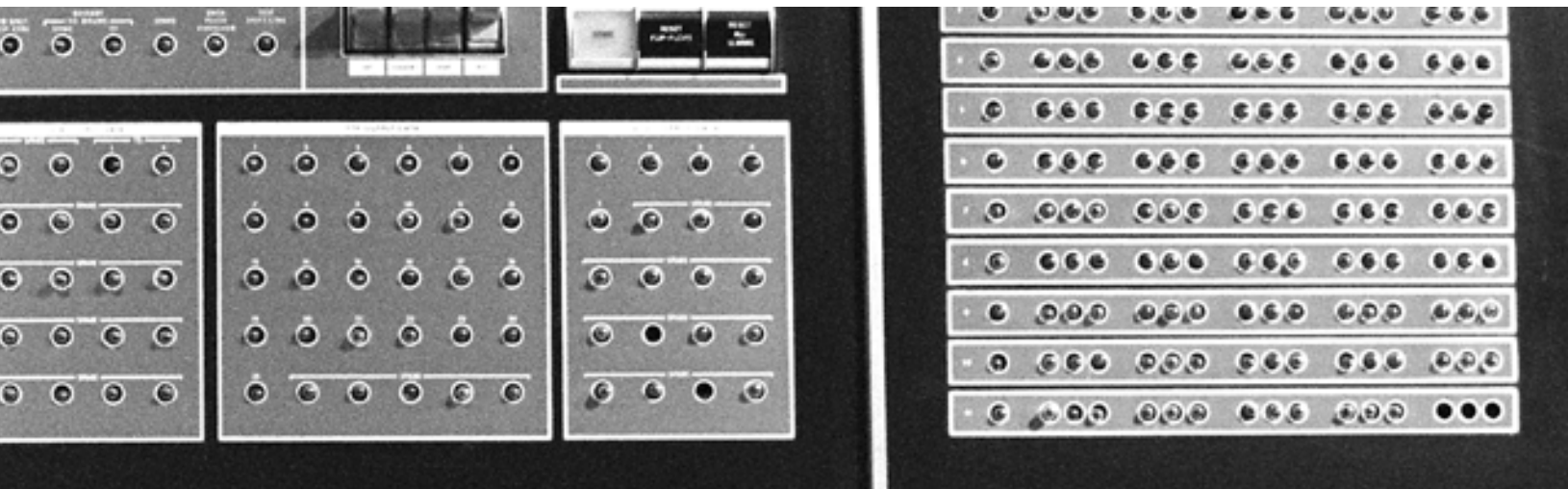


Electronic access to information on the collection is also possible through the Corporation's Web sites, and will likely increase over the planning period. Ninety-five percent of the collection is currently digitized, and will be made available on the Web sites as soon as all the necessary systems are in place. The Canada Aviation Museum already has a significant portion of its photographic collection available on its Web site, and will continue its efforts to increase the number of photographs available on the site. The Canadian National Railway Company's historical photographic collection, containing more than one million images dating as far back 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 currently contains some 5,000 images. 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 in its first year, and nearly 54,000 visits the following year. 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 held by the Canada Science and Technology Museum.

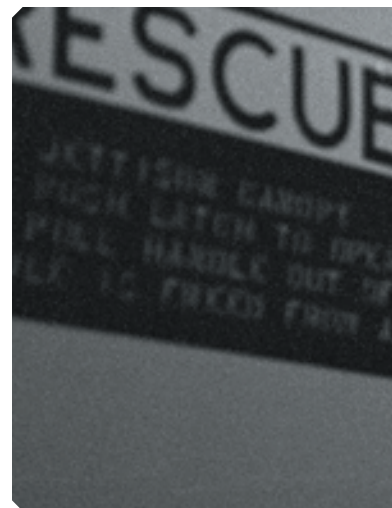
**ARTIFACT LOANS** — the richness of the Corporation's collection is one of its significant strengths. In order to increase access to its artifacts, the Corporation will maintain an active loan program of artifacts to institutions throughout Canada, the United States and abroad, so that Canadians and others can experience, firsthand, the legacy that has been preserved on their behalf. Last year, approximately 1.4 million visitors saw artifacts on loan at various borrowing institutions.

As can be seen in the tables (previous page), the Corporation's loan activities span the breadth of Canada and beyond. Further, the more detailed list (Table 2) shows the Corporation's ability and desire to work with sister institutions, ranging from the other national museums to smaller single-focus regional museums; it also shows some of the partnering projects which have been realized through loans to other government branches and Crown corporations, as well as to related industry leaders. 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.

**TRAVELLING EXHIBITIONS** — traditionally, the travelling exhibitions program has been a main component of the Corporation's outreach activities, with as many as a dozen of the Corporation's exhibitions presented by 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 by the Corporation as travellers. These exhibitions are first presented at the Corporation's museums 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 cost-effective manner.



**PROMOTIONAL ACTIVITIES** — the Corporation will continue to promote its museums as destination points for Canadians outside the National Capital Region. Promotional material such as small public displays, public service announcements, brochures, kits and magazine articles will continue to be produced and distributed, in order to increase awareness of our three 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.



# PRIMARY ACTIVITIES

## HERITAGE PRESERVATION

### 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 main subject area. The Corporation has adopted a conceptual theme — the *Transformation of Canada* — to provide a framework for its research program.

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*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 ongoing relationship between science, technology and Canadian society which has changed Canada, influenced its people and will continue to do so.*

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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 knowledge 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.*

As part of the visioning exercise, the strategic approach — including the thematic framework — is undergoing a thorough review.

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 the Web sites and publications.

### Five-Year Perspective

Historical research directed at the theme and sub-themes 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 research into manageable parts which could be completed over several years. Both the strategy, and the major subject areas which provide a structure for its application, are under review in light of significant organizational developments and the CSTM visioning exercise.



Support for exhibitions, interpretive programming and Web presentations continues to be founded on authoritative, quality research, in order to ensure the accuracy and suitability of the information being communicated. In addition, the Corporation plays an active role in producing and publishing fundamental, groundbreaking research. In many cases, this work represents a first attempt at systematic analysis and synthesis for many key topics in the history of scientific and technological endeavour in Canada. Taken as a whole, the results represent a very significant contribution to historical scholarship.

The Corporation has implemented a systematic program of both historical and collection-based research, in order to guide collection development and provide accurate information for exhibitions, interpretive programming and Web and print publications. The impact of major corporate facilities projects has led to significant delays in the completion of established performance indicators for our research function. This will require extension of these projects within the corporate plan. The review of our collection development strategy will ensure a renewed and revitalized research plan designed to meet the challenges and opportunities of future developments and growth.

#### ***Performance Indicator***

- Completion of research as per annual plan.

### **The Collection**

A major challenge for any museum is determining 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.***

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### COLLECTION DEVELOPMENT

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#### ***Strategic Approach***

The primary purpose of the 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 focussed 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.

TABLE 3

## HISTORICAL RESEARCH PLAN — 2003–2008

MAJOR SUBJECT	YEAR	PURPOSE	TOPIC
AGRICULTURE	2003–2004	Exhibition	Beekeeping
		Curator's Choice	Beekeeping
	2004–2005	Exhibition Update	Tractors
	2005–2006	Exhibition Update	Beekeeping
		Exhibition	To be determined
	2006–2007	Collection Profile	Milking Machines
2007–2008	Curator's Choice	To be determined	
AVIATION	2003–2004	Exhibition	Comprehensive Floor Review (Cont'd)
		Exhibition/Web Essay	The Wright Brothers and 100 Years of Flight
	2004–2005	Web Essay	Bush Flying in Canada
		Web Essay	Canadian Vickers in the 1920s
	2004–2005 and 2005–2006	Exhibition	General Aviation Island
		Exhibition Update	Pioneer Era
		Exhibition Update	First World War
		Exhibition Update	Bush Flying
		Exhibition Update	The Airlines
		Exhibition Update	British Commonwealth Air Training Plan
		Exhibition Update	Second World War
		Exhibition Update	Naval Flying
		Exhibition Update	Jet Island
		Exhibition Update	Seeking Safer Skies
		Exhibition	Robert W. Bradford Gallery of Aviation Art
		2005–2006	Web Essay
	Web Essay		Interwar Homebuilding in Canada
	2006–2007	Exhibition/Web Essay	The Power to Fly (engines)
			1931 Trans-Canada Air Pageant
	2007–2008	Exhibition/Web Essay	Atlantic Bridge: The Early Years of Trans-Atlantic Flight (Joint Exhibition with other Institutions)
COMMUNICATIONS	2003–2004	Historical Assessment (H.A.) Update	Printing
	2005–2006	H.A. Update	Sound Recording
		Exhibition	(Communication)*
	2006–2007	H.A. Update	Book Binding
		Exhibition	Communication
2007–2008	H.A. Update	Photography	
	H.A. Update	Film	

\*Topics that appear in parenthesis indicate research was started in that fiscal year.

MAJOR SUBJECT	YEAR	PURPOSE	TOPIC
<b>MANUFACTURING</b>	2005–2006	Historical Assessment	Electro Chemical
		Historical Assessment	(Textiles II)*
	2006–2007	Historical Assessment	Textiles II
		Historical Assessment	Electronics
<b>NATURAL RESOURCES</b>	2003–2004	H.A. Update	Domestic Technology
		Exhibition	Power Generation
		Exhibition Update	Love, Leisure, Laundry
	2006–2007	Exhibition Update	Love, Leisure, Laundry
	2007–2008	Update	Mining 1
<b>RENEWABLE RESOURCES</b>	2003–2004	Historical Assessment	(Ocean Sciences)*
	2004–2005	Historical Assessment	Ocean Sciences
	2007–2008	H.A. Update	Nuclear Energy
<b>SCIENTIFIC INSTRUMENTATION</b>	2003–2004	Exhibition Update	Log On
	2003–2004	Historical Assessment	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
2007–2008	Historical Assessment	Information Technology	
<b>TRANSPORTATION</b>	2003–2004	Historical Assessment	Commercial Vehicles
		Exhibition Update	More Than a Machine
	2004–2005	Historical Assessment	Horse Drawn Vehicles
		Historical Assessment	(Fire Technology)*
		H.A. Update	Ship Building & Naval Architecture
		H.A. Update	Marine Engineering
		Exhibition	Transportation
		Exhibition Update	Locomotive Hall
	2005–2006	Historical Assessment	Fire Technology
	2006–2007	H.A. Update	Navigational Aides
		H.A. Update	Bicycles
	2007–2008	Historical Assessment	Automotive Engineering
2007–2008	Historical Assessment	Road Construction	
<b>MULTI-DISCIPLINARY</b>	2003–2008	Exhibition & Web	Hall of Fame
	2003–2004	CSTM Visioning	CSTM History
	2003–2005	Web	CSTM/CN Photo Coll.
	2005–2006	Exhibition Update	Innovation in Canada

\*Topics that appear in parenthesis indicate research was started in that fiscal year.

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 the 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 reinvested 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 4). However, the introduction of new initiatives such as the GSTM visioning study for a new Museum, partnership exhibitions, and the new storage hangar at the Canada Aviation Museum, have seriously effected the projected rate of completion. Some projects will be carried over and completed within the five-year perspective.

Descriptions of the ideal collection, which conclude each collection assessment, 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 allow the Corporation to work in partnership with other Canadian museums and publicly owned collections to develop a National Registry of Significant Artifacts in Science and Technology. Such cooperative initiatives will enable the Corporation to continue the efficient development of its collection while providing leadership in the identification and celebration of Canada's technological achievements in collections across the nation.

#### ***Performance Indicator***

- Completion of collection assessments as per annual plan.

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### COLLECTION MANAGEMENT

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#### ***Strategic Approach***

Collection management encompasses the activities required to manage the objects accessioned into the collection. They fall into two categories: record-keeping 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 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.



TABLE 4

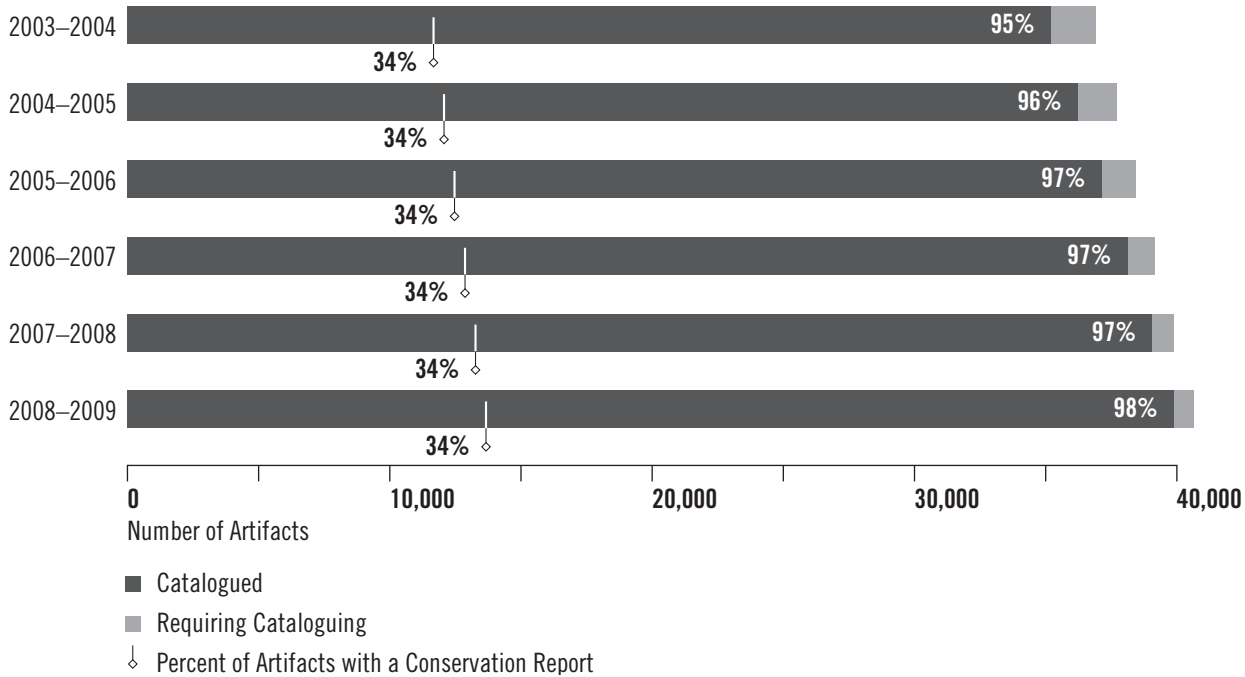
## COLLECTION ASSESSMENT PLAN — 2003–2008

MAJOR SUBJECT	YEAR	TOPIC
<b>AGRICULTURE</b>	2003–2004	Animal Powers
	2004–2005	Mowers
	2005–2006	Threshing Machines
	2006–2007	Milking Equipment
	2007–2008	Domestic Poultry Equipment
<b>AVIATION</b>	2006–2007	Engines
	2007–2008	Propellers
<b>COMMUNICATIONS</b>	2003–2004	Photography
	2004–2005	Films; Telephony
	2005–2006	Radio; Bookbinding
	2005–2006	Telegraphy
	2006–2007	Electronic Music
	2007–2008	Printing II
<b>MANUFACTURING</b>	2007–2008	Machine Tools; Tool & Die
<b>NATURAL RESOURCES</b>	2003–2004	Water Power
	2004–2005	Engines
	2005–2006	Gas Appliances
<b>RENEWABLE RESOURCES</b>	2003–2004	Forest Management
	2004–2005	Forest Harvesting
<b>SCIENTIFIC INSTRUMENTATION</b>	2003–2004	Space
	2004–2005	Metrology
	2005–2006	Exploration & Survey
	2006–2007	Radar
	2007–2008	Mathematics
	2007–2008	Medical
<b>TRANSPORTATION</b>	2004–2005	Navigational Aids & Instruments; Commercial Vehicles
	2005–2006	Ocean Sciences; Fire Technology
	2006–2007	Rail
	2007–2008	Horse Drawn Vehicles

TABLE 5

PERCENTAGE OF ARTIFACTS WITH CONSERVATION REPORTS

PERCENTAGE OF ARTIFACTS CATALOGUED TO CSTMC STANDARDS



Priority is given to preventive 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 are 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 objective of increasing accessibility for all Canadians to their scientific and technological heritage will be greatly advanced with the inception of a new computerized collection management system. The new software package, with its linkages to the corporate Web site, will make the collection database — and the related storehouse of some 110,000 digital images of objects in the collection — completely accessible to virtual visitors across Canada and around the world. When testing of the new computerized collection management system is completed, various additional applications of the system will be explored. The software will be used, for example, to make collection information available to a wider audience, beginning with the Corporation’s Intranet. When this step is completed, the next phase will involve “publishing” the collection on the Intranet and adding links to the corporate Web site so that the collection becomes accessible to the world via the Internet. Once these applications have been tested and are functioning, a full review of the software package will be undertaken in order to assess its strengths and weaknesses. This will help us prepare for a second round of product refinement, aimed at maximizing the software’s use and effectiveness while addressing any problems encountered along the way.

With regards to cataloguing, the Corporation will continue to give priority to documentation and cataloguing of all current acquisitions within a reasonable period, as well as to the upgrading of older cataloguing documentation (see Table 5).

The Corporation remains committed to providing resources for basic conservation of the collection. Although priority will be given to continued completion of artifact conservation reports, existing resources are such that overall progress on reducing the backlog will continue to be slow (see Table 5). Conservation activities will be supported by an emphasis on the improvement and monitoring of environmental standards for all collection storage and display areas, in order to ensure the preservation of the Corporation's most important and valuable assets. If the Canada Science and Technology Museum is successful in obtaining funding for a new museum building, including storage space for the collection, Conservation Services will use this opportunity to complete reports on a majority of the collection during the move to a new facility.

When the new storage hangar at the Canada Aviation Museum is completed, the aircraft currently stored inside the Museum will be moved into the new building. The additional space thus acquired will be used for new exhibitions and the expansion of many of the current displays. Over the next few years, close to 40 aircraft will be prepared by Conservation Services for these displays.

#### **Performance Indicators**

- Percentage of artifacts catalogued to CSTMC standards.
- Percentage of artifacts with a completed conservation report.

#### **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 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, self-directed 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 in which enriching experiences are offered both through human interaction and through interaction with objects and ideas.

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

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

### **Strategic Approach**

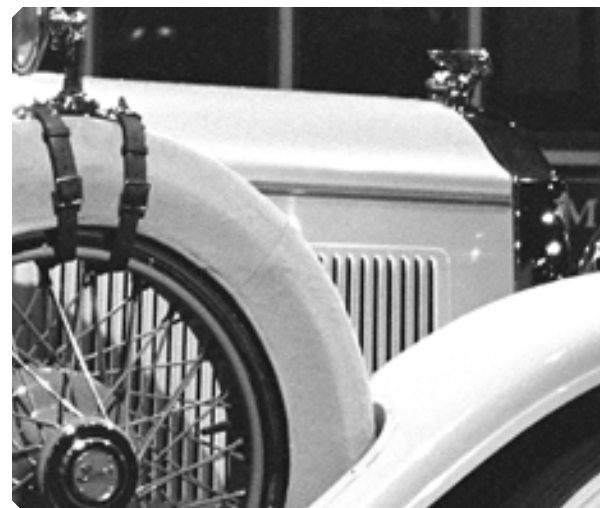
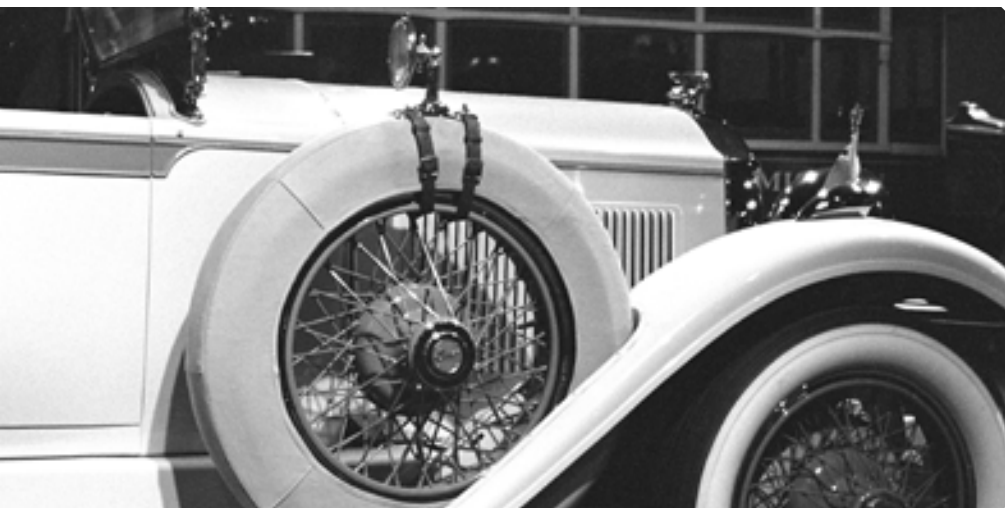
Museums traditionally use exhibitions, complemented by interpretation activities, as products to offer their visitors. In selecting exhibition and program ideas, preference is given to those that will afford the best opportunity to utilize curatorial expertise and display artifacts from the collection, 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 based on the range of experiences they afford: they must be thought-provoking, 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 interpretive 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, while also 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 quality and relevance, and to keep them responsive to teachers' 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 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 with 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***

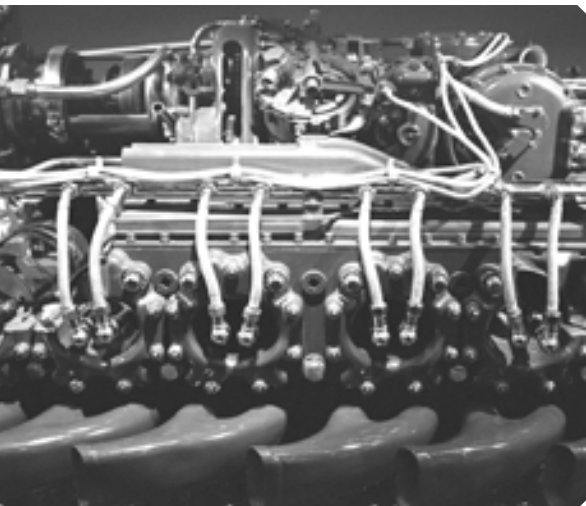
#### **Canada Science and Technology Museum**

The Museum's exhibition plan will continue to include a regular cycle of updates and replacements of its exhibition halls; however, as the visioning and feasibility studies for a new museum building conclude, the exhibition plan will be thoroughly reviewed to reflect the Museum's new long-term goals. Travelling exhibitions or exhibition components will be incorporated into the interpretive planning of new exhibitions, and will remain a key outreach effort and strategy in maintaining and enhancing the Museum's national presence. Artifact-rich exhibitions with strong narratives will continue to be a trademark of the Museum. Exhibitions will continue to provide visitors with balanced exposure to the various subject areas covered by the Museum, while also providing visitors with an opportunity to view a representative portion of the collection. The refurbishment of the Museum's temporary exhibition

hall will open up opportunities to showcase high-quality travelling or temporary exhibitions which complement the Museum's permanent exhibitions. Exhibition partnerships with other institutions will continue to be explored. The Museum will continue to invest in the next generation of heritage preservation professionals through co-op opportunities and contributions to education.

The Museum floor and grounds will continue to host high-quality interpretation activities including demonstrations, guided tours, artifact demonstrations and collection tours. Interpretive events will be enriched through collaboration with community groups and associations.

Educational programs will continue to be a focus, with a variety of programs for youth, adults and teachers. Ongoing high-quality school programs, relevant to school curricula, will continue to provide opportunities for discovery and exploration. High interest in school programs often results in capacity booking, due in part to limited programming space at the current location. With its interest in serving as many school groups as possible, the Museum has planned to renovate the space currently occupied by the Energy Hall to create new multi-purpose programming spaces. This strategy should ensure that school program attendance is maintained. National presence and outreach to the educational community will continue through programs for high school students across Canada, such as *Encounters with Canada* and *Engaging Science*. Our role in sharing science and technology information with youth, their parents and teachers will be reinforced through *Engaging Science* Teacher Workshops and a regular renewal and enrichment of our online resources. *Engaging Science*, a new endeavour,



is the result of a collaboration with Science World, the H.R. MacMillan Space Centre, and the Vancouver Aquarium and Marine Science Centre in British Columbia. National presence and outreach via partnerships and collaborations will continue to be one of the Museum's primary objectives. Summer camps will continue to be a focus, with a range of science and technology camps being offered at the Museum and in other locations. This strategy is designed to help us extend this exciting program to an expanded youth market.

Rentals of Museum facilities are expected to increase progressively over the next few years, as we invest further in this essential program. The Museum's current size and location will eventually cap this program's growth. Facility rentals will continue to foster awareness in the science and technology industry, as well as in the medical and business communities, for events such as conferences, annual general assemblies and training. The Museum's newest exhibition, **Innovation Canada**, is particularly attractive to the high-technology industry for new product launches. Additional value to the Museum from facilities rentals has been observed, as participants often return to the Museum with their families. As such, rentals will continue to contribute to Museum attendance. Rentals also encourage partnerships with industry, which will ultimately benefit Museum projects.

The Museum will continue to use a variety of communications and advertising strategies to reach its target audiences. Outreach into non-local markets will continue to be a priority, achieved by our memberships with the Ottawa Tourism and Convention Authority and l'Association Touristique de l'Outaouais, as well as seasonal campaigns which invite local residents to bring their friends and family to the Museum. The Museum will continue to reach Canadians through its membership on the Federal Taskforce on Cooperative Programming and Marketing (chaired

by the National Capital Commission), the Communications Network Committee and the Communications Network and Outreach Cluster Working Group (both chaired by Canadian Heritage) and the Cultural Attractions Committee (chaired by the Canada Science and Technology Museum).

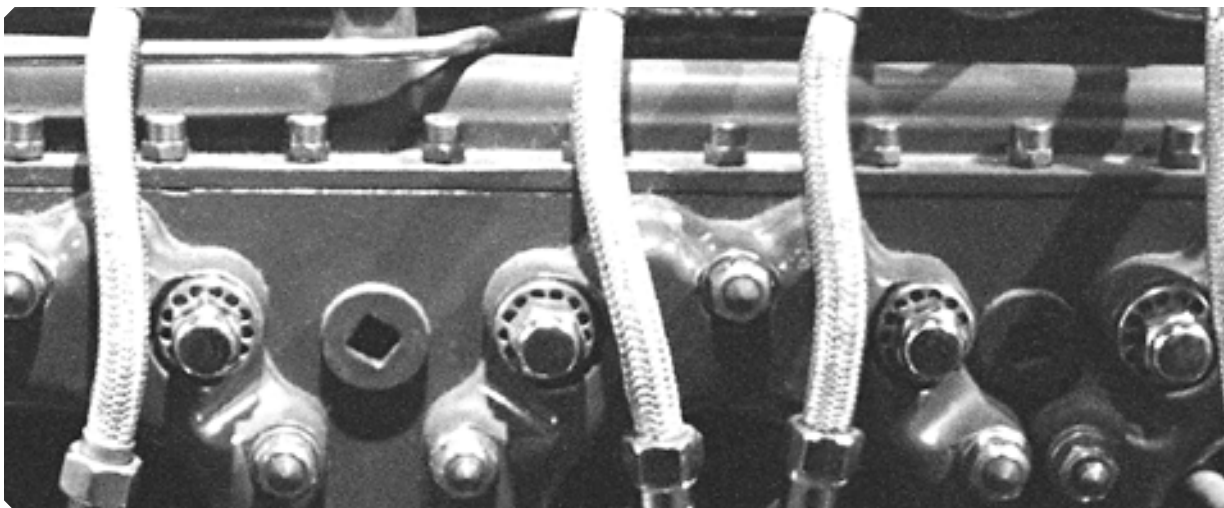
#### ***Performance Indicator***

- 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**

Even before completion, the new open-storage wing has had a considerable, but predictable, impact on the Museum's exhibition plan. Over the next five years, one of our challenges will be to develop innovative public presentation of those aircraft which are located in the storage wing, rather than in the main Museum's galleries. Another major task will be to complete a long-term plan which takes into account the greatly expanded area that will become available for exhibitions and programming. Implementing this plan will be a challenging, complicated and time-consuming undertaking.

The current interpretive structure of the Museum involves the use of thematic islands, arranged more or less chronologically. Since 1988, when the Museum opened, visitors have followed a "walkway of time" to explore the evolution of aviation in Canada, from its earliest beginnings to the jet age. The Museum believes that this basic structure has served visitors well. Nevertheless, the Museum has always had numerous other aircraft it would also like to showcase and, as mentioned above, continues to acquire other "must-sees" which ought to be displayed. Further, it is likely that additional new and important acquisitions are on the way.



The difficulty lies in the domino effect which results when even one aircraft is moved on or off a display island. This process affects the entire museum floor, and cannot be undertaken piecemeal. The tangible benefit of finally getting the space that will allow this shuffle should manifest itself immediately in more dynamic exhibitions — particularly as the Museum's plans call for the addition of many more human-interest stories to each island. Various interpretive techniques and technologies, new and old, will be explored to ensure that our exhibitions and programs appeal to the entire range of Museum visitors.

The exhibitions program will also continue to address the needs of current visitors: the idea of achievable, affordable change to encourage repeat visitation will remain an ongoing challenge. In the meantime, this exciting and demanding situation holds out the possibility of invigorating the Museum's travelling exhibitions program. The intent will be to maximize the effect of the Museum's own temporary exhibitions, while also expanding inter-museum contacts by bringing in more exhibitions from outside institutions and exploring ways to create new joint exhibitions, thereby enabling resources to be more effectively utilized.

In order to consistently position the Canada Aviation Museum as a world-class institution, its strategic communications plans strive to create a balance between media relations, public relations and promotional activities. These special initiatives will reinforce the strategic brand image of the Museum, and will employ vehicles with regional and national scope, such as the production of television public service announcements to be distributed across Canada. Current media relations activities focus on the Museum's accomplishments, and place great emphasis on national and aviation media to generate ongoing interest and enthusiasm for Canada's aviation heritage. Additionally, new partnerships in the cultural sector are well underway, using exciting

new methods to promote the region to Canadians. An important focus of communications efforts in the years to come will be the development and execution of a strategic communications plan for the new collection storage wing and for the reconfiguration of the existing Museum, in order to ensure maximum exposure and dissemination of information to the Museum's supporters, stakeholders and all Canadians.

We will also continue to strive for innovative, informative, hands-on museum programming which effectively reaches all ages and levels of understanding. The Museum is exploring outreach opportunities to seniors through agencies such as Elderhostel, to high school youth across Canada through *Encounters with Canada*, and to new Canadians through multicultural community associations. The Museum is also focusing on developing innovative training techniques to ensure quality service to our visitors. The Museum is aiming for the most engaging, proactive, and knowledgeable staff, thereby increasing visitor satisfaction.

The Museum offers quality school programs, weaving Canada's aeronautical heritage into the context of science and technology, Canadian history and geography and social studies, while also supporting provincial school curricula across the country. The Museum will continue to develop and distribute interpretive materials intended to reinforce our role as the principal aviation resource centre for schools in Canada. The Museum's Education Services section will research the possibility of finding funding to develop a co-op program for young Aboriginal students in university faculties of education, designed to advise and develop materials on the Aboriginal contribution to aviation in Northern Canada.

We will continue our efforts to partner with other museums, cultural institutions, aviation associations, embassies and government agencies, in order to enhance the Museum's programs and events. Increased collaboration with groups such as the Air Cadet League of Canada,



the EAA “Young Eagles”, the Canadian Aeronautics and Space Institute (CASI), the Canadian Aviation Maintenance Council, technical schools and universities is expected to provide greater opportunities for outreach. Sharing resources with other federal government departments such as Transport Canada, Environment Canada, Natural Resources Canada and the Department of National Defence will continue to be one of the Museum’s main objectives.

Rentals of museum facilities are expected to continue to increase significantly over the next few years with the building of the new storage wing. This will provide the Museum with the ability to hold programming and facility rentals simultaneously. The Museum will continue to offer a prestigious event venue to the aerospace and high-technology industries, universities and colleges, foreign embassies and cultural institutions, among other clients. In addition to the revenues they generate, facility rentals introduce new audiences to the Museum, and increase awareness among those individuals and associations who may have the means to support the Museum’s projects.

***Performance Indicator***

- 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**

Within a few short years, the Canada Agriculture Museum has grown to become a successful museum in the National Capital Region. On a limited budget built through a reallocation of internal corporate funding and revenue generation, it has developed into a museum visited and appreciated by area residents and visiting tourists with the same regularity as several other long-established national museums. Having built a solid foundation, the Canada Agriculture Museum now needs financial resources equivalent to those enjoyed by other national museums, if it is to build upon its local success, and to start fulfilling its national mandate. The Canada Agriculture Museum teaches and demonstrates the essential importance of agriculture in visitors’ everyday lives. Agriculture touches Canadians several times a day, whether through the foods they eat or the fibres they wear. If the Canada Agriculture Museum is to become a national museum in the fullest sense of the word, and if it is to carry its messages to a pan-Canadian audience, it requires increased funding to establish a national presence. Funding will allow travelling exhibitions to take museum artifacts and research about Canada’s rich agricultural heritage to all corners of Canada. Funding will allow the Web site to offer Canadians a full picture of the Museum’s exhibitions, collections and research.

The long-term priorities for the Canada Agriculture Museum are to continue its sustained growth, and to build on existing excellent public support in order to become fully operational year-round. This will be done by improving the quality of the visitor experience through the replacement and updating of exhibitions, the delivery of high-quality interpretive and school programs, and the development of improved visitor amenities such as food services, boutiques and washrooms. A long-term exhibition plan has been developed to guide replacement of the exhibitions. The current exhibition space is not suitable for use in the winter months, nor for the display of certain types of artifacts; hence, the feasibility of using part of another existing building as a future location for year-





round exhibitions continues to be pursued with Agriculture and Agri-Food Canada, which owns the building. If the venue for exhibitions changes, the long-term exhibition plan would have to be reviewed.

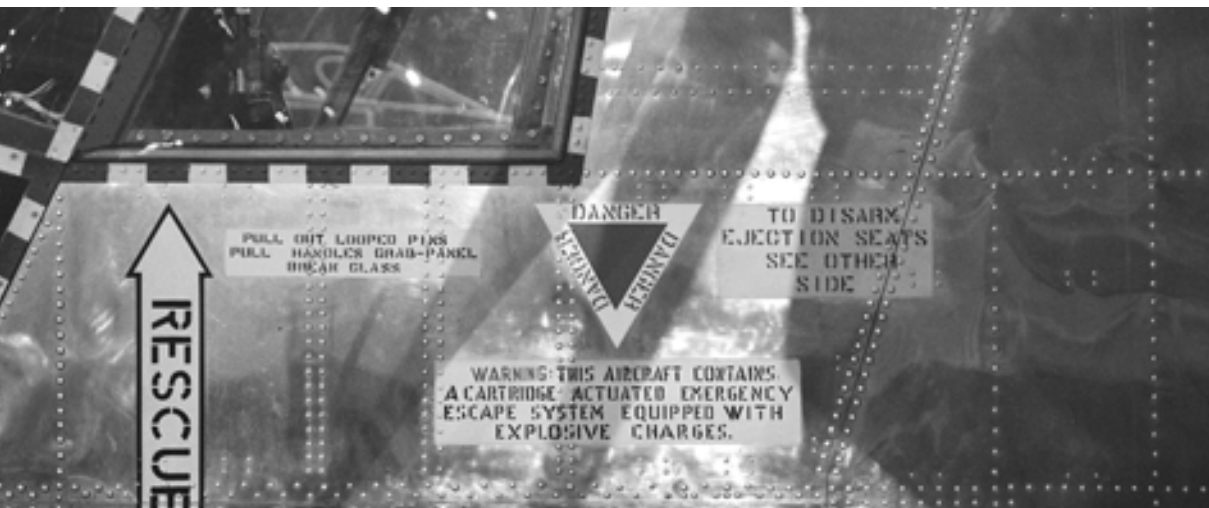
The Museum is considering moving agricultural artifacts and archival materials from their current location across the city at the Canada Science and Technology Museum, although funding will be required in order to do so. Such a move will allow curatorial staff to readily service the needs of a growing portion of the visiting public which wishes to undertake amateur or scholarly research on agricultural topics. Increased funding also will allow the acquisition of the artifacts and archival materials needed to build a broadly representative collection showcasing Canada's agricultural past.

The Museum will continue to build on innovative and varied programming aimed at fostering an understanding and appreciation of Canada's agricultural heritage. Hands-on programming with animals, plants and food will be featured. Daily demonstrations such as those on rare breeds and calf care will be further developed. Special weekend theme events such as the Ice Cream Festival will continue to be offered, and industry partners will continue to be sought. School programs have been developed in line with the new Ontario curriculum, for those primary and secondary levels with an emphasis on science and technology. Links to the new Quebec and pan-Canadian science curriculum are being explored. These programs will be increased towards a longer-term objective of having students comprise 20–25% of total attendance. Better serving the educational market is a priority of the Museum, and this can be achieved by having exhibitions that are not closed 40% of the school year, as they are now. Acquiring year-round indoor exhibition halls and spaces for visitor services and programming will go a long way towards fulfilling this goal.

Programming undertaken in collaboration with various partners such as FunFest with Agriculture and Agri-Food Canada (AAFC), and “A Slice of Farming” with the Agricultural Awareness Committee and local producers — will continue to be developed. In addition, the Museum is pursuing discussions on the development of a collaborative travelling exhibition with partners in the health sector.

The Canada Agriculture Museum firmly believes that young Canadians should be encouraged to consider a career in agricultural sciences and technology. To this end, the Museum offers a two-week Junior Farmer program which initiates teenagers into the world of agriculture. Other programs with the 4-H Club organization are being assessed, as is the prospect of involving researchers from AAFC in more Museum activities. There is now an opportunity to further expand the Museum through permanent exhibitions and more programs by making it a year-round operation; however, additional resources will be required. In addition, one of the Museum's significant challenges will be to meet the needs of its visiting public in terms of offering dependable, quality food services, an expanded boutique, additional washrooms and an indoor lunch area for groups.

The Museum has begun to proactively seek and develop partnerships with various agricultural institutions and museums in Canada and around the world. In particular, it continues to 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.



To disseminate information on the agricultural collection to all Canadians, the Museum's Web site now features a *Collection Profile* on threshing machines, and a *Curator's Choice* on tractors. Each year, additional research material will be made available to the public.

The Museum has been a key participant in the consultation process on the future of the Central Experimental Farm, which is managed by Agriculture and Agri-Food Canada, and we will continue to participate on the C.E.F. Advisory Council and provide input in the development of a National Historic Site Management Plan. The Museum will pursue discussions on the development of its own Master Site Plan, and will address issues such as the availability of additional buildings to possibly house the agricultural artifact collection onsite.

**Performance Indicator**

- 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**

Electronic information technology in general, and the World Wide Web in particular, have evolved as major dissemination tools for museums. They provide opportunities for museums to reach a far broader audience than could ever be welcomed to the exhibition floor with a much greater range of products and services, and provide a 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.***

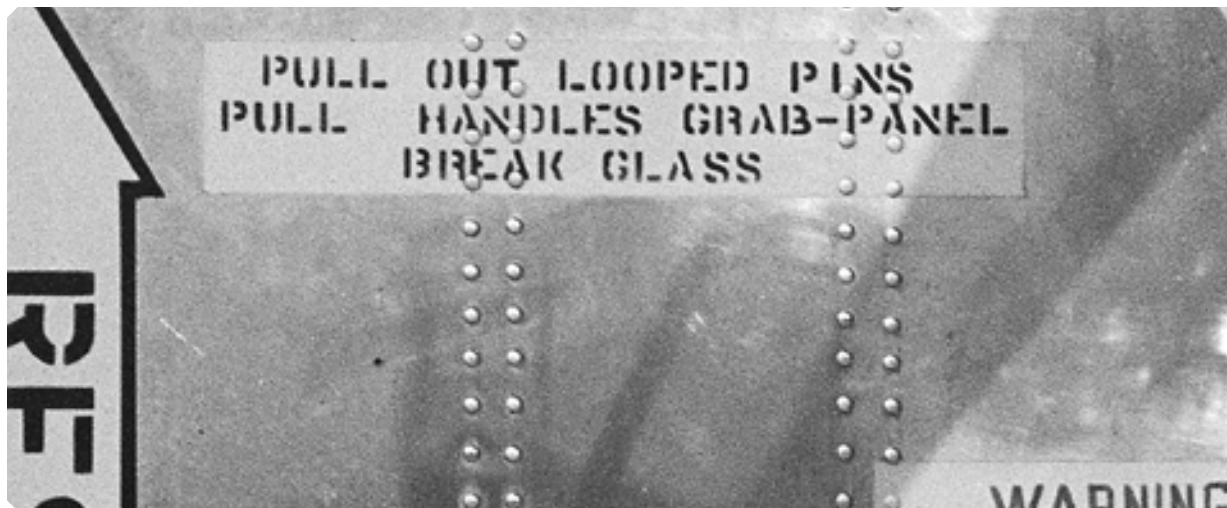
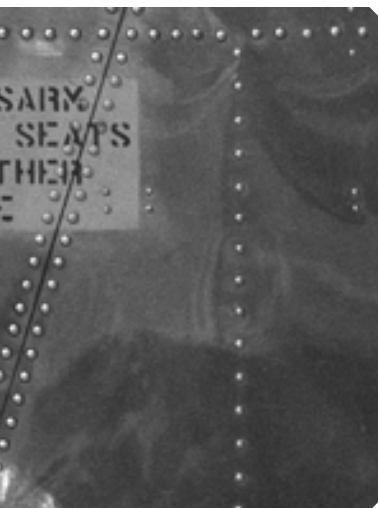
**Strategic Approach**

The Corporation develops 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 takes advantage of the nature of the Internet itself, in order 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 of providing detailed or general information as required.

The Government of Canada is committed to delivering key government services electronically to all Canadians by the year 2004. Several initiatives are underway to increase the availability of cultural content,



and the Corporation looks forward to contributing to these initiatives and making its intellectual assets available to all Canadians as well as to 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 engine 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 extent to which the number of available images can be increased on the CN Gallery is dependent on funding; however, it is expected that at least 8,000 images will be mounted by the end of the planning period, and that additional images from the aviation archival collection will also be added. The Canada Science and Technology Museum will make further additions to this Web gallery exploring different themes based on the CN photographs. Publications

related to the collection, including *Collection Profiles*, *Curator's Choice*, and *A Closer Look* 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. Consideration will also be given to the electronic distribution of other publications, such as the *Material History Review*. The Canada Aviation Museum will continue to develop Web essays on a variety of topics. These essays have proven very popular with visitors to the Web site, and statistics indicate that downloading of the essays is increasing.

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. An internal study has already 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 this country. The proposal will be further developed over the upcoming year and outside sources of funding, as well as partnerships, will be explored for this purpose. The Corporation will also develop information on more specific audiences, in order to create new products tailored 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 online reservations and product sales; general information about the Corporation such as the annual report and corporate plan summary; and online 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.

TABLE 6

## PUBLICATIONS PLAN

YEAR	COLLECTION PROFILE	CURATOR'S CHOICE	TRANSFORMATION	MHR	MONOGRAPH
2003–2004	Outboard Motors Electric Ranges	Cape North Lighthouse Nortel Networks Connexions Beekeeping	Scientific Instruments	#57 #58	CSTM/CN Photograph Collection
2004–2005	Forest Fire Technology Dominion Observatory	Power Generation Forest Fire Technology	Communications	#59 #60	CSTM/CN Photograph Collection
2005–2006	Cameras Telephony	N/A	Renewable Resources	#61 #62	CSTM/CN Photograph Collection BE2c
2006–2007	Printing Machine Tools Milking Machines	N/A	Natural Resources	#63 #64	CSTM/CN Photograph Collection
2007–2008	Sleighs & Carriages Calculating Devices	Agriculture Topic (TBD)	Manufacturing	#65 #66	CSTM/CN Photograph Collection Curtiss Seagull Gliding in Canada

Delivery of online 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 online 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 the traditional museum services, and cannot be developed much further without additional resources. While sponsorship 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 Indicator

- Number of Web site visitors.

### 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. CSTMC market research has identified a continued interest in, and demand for, print publications. A selection of the most interesting historical assessment documents are published in the *CSTM Transformation Series*. Special topic articles, research reports and reviews on various themes in Canada's material culture contributed by external and staff specialists appear in the serial *Material History Review (MHR)*. A visually-rich, in-depth analysis of individual artifacts or related groupings is also provided in the new Web publication *A Closer Look*. 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 develop an action plan in response to evaluations of its current publication offerings. It will also continue to 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 Web-based 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 continues to be more effective than print production. Surveys will be undertaken, in order 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 opportunities for partnerships and external funding to facilitate increased production of titles in the *Transformation Series*.

Of particular note, the Canada Aviation Museum will be publishing a revised edition of a popular out-of-print book on its history and collections. The book, which will be published to help commemorate the centenary of the Wright Brothers' first flight and the opening of the new Canada Aviation Museum wing, will trace the history of the Museum and will document and illustrate the Museum's impressive collection. The Museum is also cooperating with different associations and authors to produce aviation-related publications. One example of this activity is the production of a series of three volumes on the Avro Arrow by Peter Zuuring; these publications were released recently and photos included in these volumes are from the Museum's archival photo collection.

#### **Performance Indicator**

- Number of publications completed as per annual plan.

### **SUPPORT ACTIVITIES**

A number of activities are carried out in support of the Corporation's museological activities. 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 fulfillment of its mandate. The success of revenue generating initiatives depends upon 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 undertaken, 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 that complement the Museums' programs and collections.

TABLE 7

## REVENUE PLAN

REVENUES (IN THOUSANDS OF DOLLARS)	2003–2004	2004–2005	2005–2006	2006–2007	2007–2008
<b>ADMISSIONS</b>					
Science and Technology Museum	\$ 895	\$ 875	\$ 875	\$ 875	\$ 875
Aviation Museum	555	585	585	585	585
Agriculture Museum	305	305	310	310	310
<b>OTHER</b>	540	585	585	580	580
<b>COMMERCIAL OPERATIONS</b>	1,090	1,115	1,125	1,130	1,130
<b>CORPORATE DEVELOPMENT</b>	500	500	500	500	500
<b>INTEREST</b>	160	150	150	150	150
<b>TOTAL REVENUE</b>	\$ 4,045	\$ 4,115	\$ 4,130	\$ 4,130	\$ 4,130

• **CORPORATE DEVELOPMENT** — activities designed to offer opportunities for 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, focusing 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 upon a broad membership program which encourages a close relationship between local audiences 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 of 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.

### *Five-Year Perspective*

The Corporation will continue to actively pursue revenue generating activities. However, the success of certain activities, such as memberships, 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, while philanthropic fundraising activities are dependent upon the levels of national awareness associated with the Corporation's three museums. Budgets will be revised to take changes in attendance patterns and new revenue opportunities into account as they occur. The revenue plan for the next five years is laid out in Table 7.

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 its Web sites. In addition to the online 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 online 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.

## 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 our 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, 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.

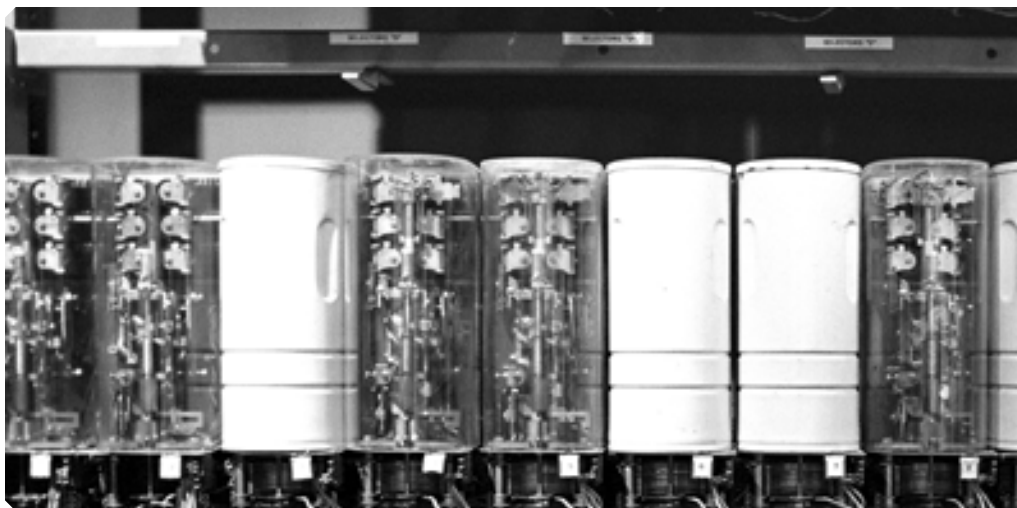
For all of its facilities, the Corporation will maintain a regular program of building inspections to provide for timely maintenance and the avoidance of potentially costly repairs to correct undetected problems. Compliance with applicable building and safety codes will also continue to be monitored 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 CSTM facility project become known.

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.

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 extend 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 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 levels. Efforts will continue to enhance the storage environment through the monitoring capabilities of the DDC system. Deployment of the exhibition environment system will be reviewed and implemented where feasible.

At the **Canada Aviation Museum**, construction of the new hangar will provide appropriate space for collection storage, and will also free up 40% of the current public building. Planning for updated exhibition and programming areas will take place in the upcoming year, with the refit expected to begin in 2004–2005 as additional space becomes available. Funding for the refit of the public space has not yet been provided, but has been identified through a Canadian Heritage Portfolio Assessment exercise.

A Memorandum of Understanding with the Rockcliffe Flying Club provides for the ongoing 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 have been put in place, and increased monitoring will continue, based on the needs established between the Corporation and the Flying Club.

Deregulation of utilities has accelerated review of, and modifications to, the heating and cooling system. An investment of \$170,000 has been made, with an anticipated payback in 2.75 years. This will reduce operational costs, while contributing to the federal government's Greening Initiative.

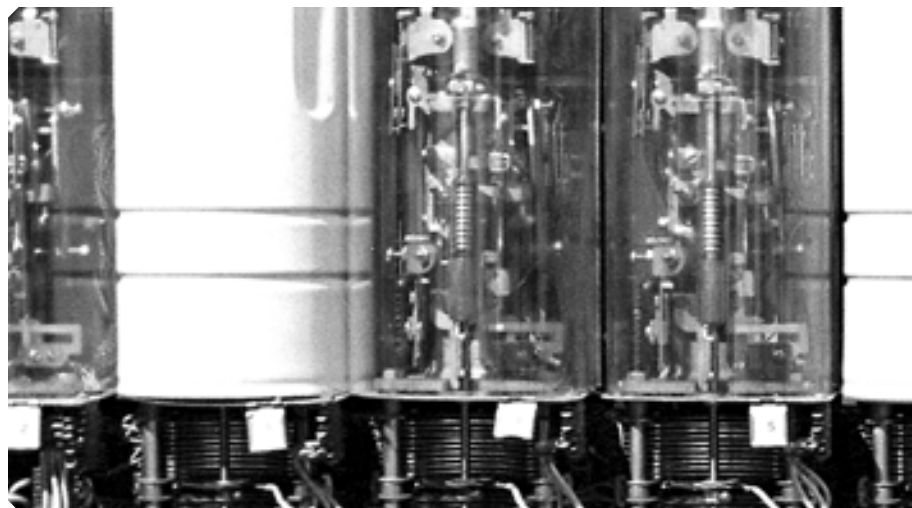
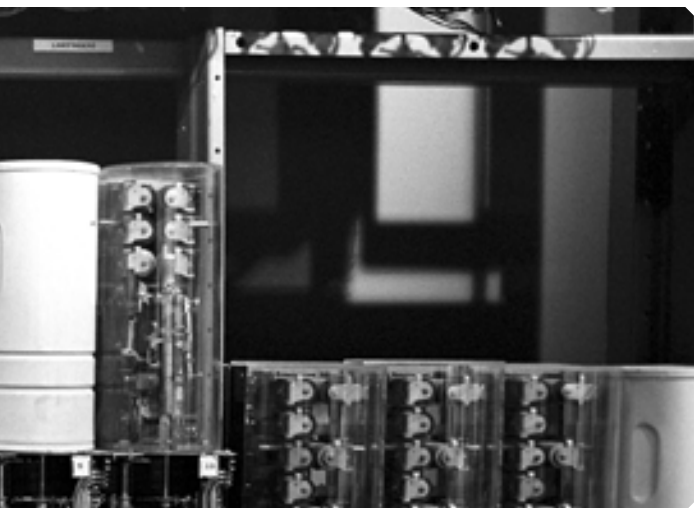
Other methods of providing heat and cooling, such as underground heat sources, will be analyzed for the new building.

The Corporation's plans for the **Canada Agriculture Museum** include occupying the remainder of Building 94 for office space, for a new exhibition 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 Museum's site plan. Additional resources for various services and amenities will be required to meet needs arising from increased activity on the site.

#### ***Performance Indicator***

- 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 enable the fulfilment of the Corporation's public role in providing national and international audiences secure access to Corporate information resources, while facilitating internal business practices.***

### ***Strategic Approach***

Informatics provides information technology infrastructure and services as an enabler of corporate objectives and functions. The Corporation applies a multi-faceted information security strategy, employing "defence in depth". Information security measures are reviewed on an ongoing basis.

Informatics guides the Corporation in the evolution of its information architecture, to facilitate the management of information, both for internal operational needs and for external audiences. The effective management of information resources is a collaborative endeavour, and Informatics engages other corporate functions in achieving this end.

### ***Five-Year Perspective***

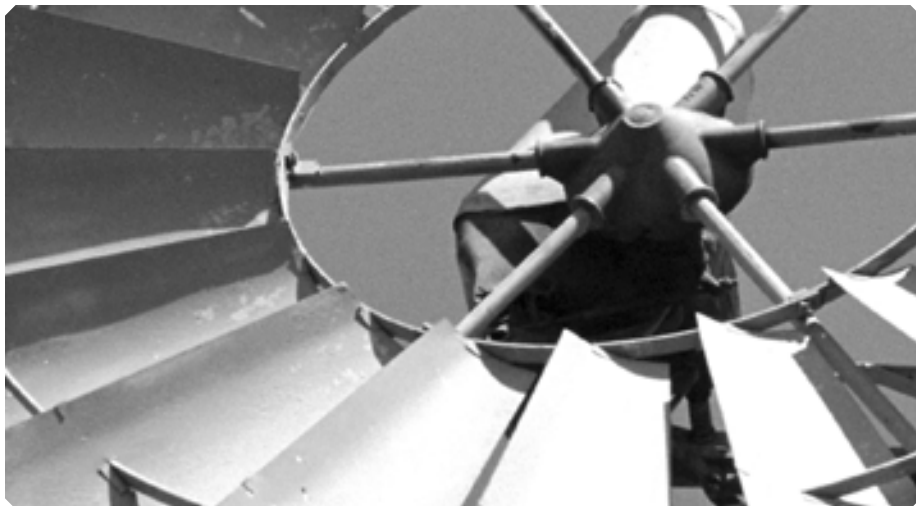
Investments in information technology infrastructure will provide a foundation allowing the Corporation to exploit new media and new technologies for content delivery, and will enable operating efficiencies such as "voice over IP". This upgraded infrastructure will increase the Corporation's opportunities to work with partners and sponsors. Infrastructure improvements will continue with the completion of network hardware upgrades, upgrades to operating software for the Corporation's network, and an integrated approach to server upgrades.

Refinements will be made to Web content management, improving the Corporation's ability to deliver rich content to the public. Existing heritage information resources will be leveraged, making them directly available to both internal and external audiences.

Management of corporate business information resources will be enhanced, focusing on upgrades to strategic information systems, document and records management, system integration, and an enhanced internal Web portal (Intranet) for internal communications and collaboration.

### ***Performance Indicators***

- Percentage of workstations that meet the Corporation's hardware standard.
- Percentage of workstations that meet the Corporation's software standard.



### **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 Crown corporation, the CSTMC is subject to numerous pieces of legislation, and to 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 its contribution to the accomplishment of its 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. As part of the succession planning process, competency profiles will be developed for each position, along with a new performance evaluation program. Additional emphasis will be given to the training and development of human resources, in order to better meet the Corporation's upcoming challenges. Implementation of a new classification system and a new electronic Human Resources Information system will be completed in the upcoming fiscal year.

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 for 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

## 2003–2004 to 2007–2008

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 revenues before expenses.

**NOTE:** *Revenues from Corporate Development activities fluctuate from year to year, depending upon the availability of properties for sponsorship, and opportunities for fundraising. Budgets are adjusted yearly within a five-year average, and firm targets are established for Year 1 of the plan. It should be noted that in-kind contributions are not included in the Corporate Development budget totals.*

TABLE 8

## FINANCIAL SUMMARY FOR THE PRECEDING AND CURRENT FINANCIAL YEARS AND THE PLANNING PERIOD

(in thousands of dollars)

	2001 –2002	2002 –2003	2003 –2004	2004 –2005	2005 –2006	2006 –2007	2007 –2008
<b>BALANCE SHEET</b>							
<b>ASSETS</b>							
Current							
Cash and short-term investments	\$ 3,577	\$ 4,528	\$ 616	\$ 1,104	\$ 1,507	\$ 1,790	\$ 2,073
Accounts receivable							
Government departments	1,459	450	450	450	450	450	450
Other	358	250	250	250	250	250	250
Inventories	412	400	400	400	400	400	400
Prepaid expenses	409	100	100	100	100	100	100
	6,214	5,728	1,816	2,304	2,707	2,990	3,273
Restricted cash and investments	344	190	195	200	210	210	210
Collection	1	1	1	1	1	1	1
Capital assets	9,955	10,042	26,314	30,548	28,634	26,540	24,266
	\$ 16,515	\$ 15,961	\$ 28,326	\$ 33,053	\$ 31,552	\$ 29,741	\$ 27,750
<b>LIABILITIES AND EQUITY OF CANADA</b>							
Current							
Accounts payable and accrued liabilities							
Government departments	\$ 133	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200
Other	2,132	1,600	1,600	1,600	1,600	1,600	1,600
Current portion of accrued employee severance benefits	91	90	90	90	90	90	90
Deferred revenues	95	50	50	50	50	50	50
	2,451	1,940	1,940	1,940	1,940	1,940	1,940
Accrued employee termination benefits	1,394	1,300	1,320	1,340	1,360	1,360	1,360
Other deferred revenues	344	190	195	200	210	210	210
Deferred capital funding	12,372	12,459	24,591	28,825	26,911	24,817	22,543
Equity of Canada	(46)	72	280	748	1,131	1,414	1,697
	\$ 16,515	\$ 15,961	\$ 28,326	\$ 33,053	\$ 31,552	\$ 29,741	\$ 27,750

TABLE 8 – CONTINUED

## FINANCIAL SUMMARY FOR THE PRECEDING AND CURRENT FINANCIAL YEARS AND THE PLANNING PERIOD

(in thousands of dollars)

	2001 –2002	2002 –2003	2003 –2004	2004 –2005	2005 –2006	2006 –2007	2007 –2008
<b>STATEMENT OF OPERATIONS</b>							
<b>REVENUES</b>							
Admissions							
Science and Technology	\$ 861	\$ 880	\$ 895	\$ 875	\$ 875	\$ 875	\$ 875
Aviation	484	525	555	585	585	585	585
Agriculture	308	300	305	305	310	310	310
Other	701	570	540	585	585	585	585
Commercial Operations	1,111	1,015	1,090	1,115	1,125	1,125	1,125
Corporate Development	598	590	500	500	500	500	500
Interest	188	160	160	150	150	150	150
Total revenue	\$ 4,251	\$ 4,040	\$ 4,045	\$ 4,115	\$ 4,130	\$ 4,130	\$ 4,130
<b>EXPENSES</b>							
Public Facilities							
Science and Technology	\$ 9,432	\$ 9,400	\$ 8,270	\$ 8,420	\$ 8,420	\$ 8,420	\$ 8,420
Aviation	5,361	5,100	4,890	4,500	4,500	4,500	4,500
Agriculture	2,467	2,400	2,415	2,300	2,400	2,500	2,500
Collection Management	4,885	4,600	4,515	4,515	4,515	4,515	4,515
Management Support							
Directorate and Board	974	1,050	995	945	945	945	945
Corporate Development	596	500	670	600	600	600	600
Accommodation	357	325	465	400	400	400	400
Protection	319	255	290	320	320	320	320
Administration	2,610	4,370	2,860	3,400	3,400	3,400	3,400
Amortization	1,235	1,918	2,078	3,546	4,169	4,349	4,529
Total Expenses	\$ 28,236	\$ 29,918	\$ 27,448	\$ 28,946	\$ 29,669	\$ 29,949	\$ 30,129
Excess of expenses over revenue	(23,985)	(25,878)	(23,403)	(24,831)	(25,539)	(25,819)	(25,999)
Parliamentary appropriation	22,416	25,996	23,611	25,299	25,922	26,102	26,282
Net (Loss) Income	\$ (1,569)	\$ 118	\$ 208	\$ 468	\$ 383	\$ 283	\$ 283
Equity of Canada at the start of the year	1,523	(46)	72	280	748	1,131	1,414
Equity of Canada at the end of the year	\$ (46)	\$ 72	\$ 280	\$ 748	\$ 1,131	\$ 1,414	\$ 1,697

TABLE 8 – CONTINUED

## FINANCIAL SUMMARY FOR THE PRECEDING AND CURRENT FINANCIAL YEARS AND THE PLANNING PERIOD

(in thousands of dollars)

	2001 –2002	2002 –2003	2003 –2004	2004 –2005	2005 –2006	2006 –2007	2007 –2008
<b>STATEMENT OF CASH FLOWS</b>							
<b>Cash Flow from Operations</b>							
Cash received (clients)	\$ 5,891	\$ 4,752	\$ 3,805	\$ 3,885	\$ 3,880	\$ 3,880	\$ 3,880
Cash received (Parliamentary appropriations)	20,555	24,078	17,393	21,753	21,753	21,753	21,753
Cash paid — suppliers and employees	(26,607)	(28,238)	(25,350)	(25,380)	(25,480)	(25,600)	(25,600)
Interest received	188	160	160	150	150	150	150
Total cash flows provided by operating activities	27	752	(3,992)	408	303	183	183
<b>Cash Flow from Investing Activities</b>							
Acquisition of capital assets (net)	(2,305)	(2,005)	(18,350)	(7,780)	(2,255)	(2,255)	(2,255)
(Increase)/Decrease in restricted cash and investments	(103)	154	(5)	(5)	(10)	0	0
Total cash flow used in investing activities	(2,408)	(1,851)	(18,355)	(7,785)	(2,265)	(2,255)	(2,255)
<b>Cash Flow from Financing Activities</b>							
Funding for capital assets	4,095	2,005	18,350	7,780	2,255	2,255	2,255
Restricted contributions and related investment income	185	46	85	85	110	100	100
Total cash flow provided by financing activities	4,280	2,051	18,435	7,865	2,365	2,355	2,355
<b>Increase (Decrease) in cash</b>							
Cash and short-term investments at the beginning of the year	1,899	952	(3,912)	488	403	283	283
Cash and short-term investments at the end of the year	\$ 3,576	\$ 4,528	\$ 616	\$ 1,104	\$ 1,507	\$ 1,790	\$ 2,073



# **OPERATING BUDGET SUMMARY**

**2003–2004**

The Canada Science and Technology Museum Corporation's Operating Budget for 2003–2004 is \$27,448,000. This Budget is presented on the accrual basis of accounting.

(in thousands of dollars)

	2003–2004 Budget	2002–2003 Budget
<b>REVENUE</b>		
Operations:		
Admissions		
Science and Technology	\$ 895	\$ 800
Aviation	555	490
Agriculture	305	280
Other	540	505
	<hr/> 2,295	<hr/> 2,075
Corporate Development	500	605
Commercial Operations	1,090	1,165
Interest	160	175
Revenue from operations	<hr/> 4,045	<hr/> 4,020
Appropriations:		
Main estimates	35,343	24,833
Program integrity/security	—	1,200
Deferred appropriation use in current year to complete capital projects	4,140	—
Purchase of capital assets	(18,350)	(3,606)
Amortization of deferred capital funding	2,078	1,582
Revenue from appropriations	<hr/> 23,611	<hr/> 24,009
Total Revenue	<hr/> <b>\$ 27,656</b>	<hr/> <b>\$ 28,029</b>



(in thousands of dollars)

	2003–2004 Budget	2002–2003 Budget
<b>EXPENSES</b>		
Collection Management	\$ 4,515	\$ 4,100
Management of Museum Sites and Programs		
Science and Technology	8,270	10,020
Aviation	4,890	4,200
Agriculture	2,415	2,200
	15,575	16,420
Common Support Activities		
Directorate and Board	995	845
Corporate Development	670	500
Accommodation	465	600
Protection	290	320
Administration	2,860	3,400
	5,280	5,665
Other Expenses		
Reserves	—	800
Amortization	2,078	1,582
	2,078	2,382
Total Expenses	27,448	28,567
Surplus (Deficit)	\$ 208	\$ (538)

## ASSUMPTIONS

The operating budget for 2003–2004 is based on the following assumptions.

### ADMISSIONS

The estimated revenue from admission fees for 2003–2004 is based on the assumption that attendance will remain stable. The estimates do not include any price changes which may occur in 2003–2004.

### 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 Agriculture's 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 offsite 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 the 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

Corporate Development activities include sponsorship, fundraising and a membership program.

### APPROPRIATION

The appropriation amounts included in the operating budget for 2003–2004 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 2003–2004 are \$2,849,000.



# **CAPITAL BUDGET SUMMARY**

**2003–2004**

The Canada Science and Technology Museum Corporation's Capital Budget for 2003–2004 is \$18,350,000. This budget is presented on the accrual basis of accounting.

(in thousands of dollars)

	<b>2003–2004 Budget</b>	<b>2002–2003 Budget</b>
<b>EXPENDITURES</b>		
Collection Management	\$ 130	\$ 75
Management of Public Facilities		
Science and Technology	300	400
Aviation	17,470	2,450
Agriculture	150	375
	<u>17,920</u>	<u>3,225</u>
Common Support		
Protection	150	150
Administration	150	140
	<u>300</u>	<u>290</u>
Reserve	—	16
Total expenditures	<u>\$ 18,350</u>	<u>\$ 3,606</u>

#### ASSUMPTIONS

The Capital Budget for 2003–2004 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.