

Société du
CANADA SCIENCE AND TECHNOLOGY MUSEUM
Corporation

MUSÉE DES SCIENCES ET DE LA TECHNOLOGIE DU CANADA

Annual Report **2000–2001**



Canada

CANADA SCIENCE AND TECHNOLOGY MUSEUM • CANADA AGRICULTURE MUSEUM • KUSHAL AGARWAL • KEN BARRY • GRAHAM BENNETT • SIEGFRIED BERNHOFF • DOUG BIESENTHAL • BIMAN BIHARI • JOE BLANCHETT • ERIC BOND • EMYLIE BONNEVILLE • RICHARD BONNYCASTLE • FRASER BOULTON • EDMUND BOWKETT SR. • EDMUND BOWKETT JR. • SHERI BOWMAN • ANDREW BOWN • PAUL BOWN • JOHN BRADEN • RICHARD BRISSON • FRANCES BROWN • VALERIE BRÛLÉ • JOAN BUSCHE • DOUG CAMPBELL • OPHNEIL CAMPBELL • PAUL CAMPBELL • REGINALD CHAPPEL • ROBERT CLERMONT • GUYRLAINE CLERSAINT • STEVE COCHRAN • ISABEL CORCORAN • DON CRAIG • MATTHEW CUMMINS • ROBERT CUMMINS • LANDRY DE SOUZA • DANIEL DOCTOR • DUNCAN DU FRESNE • PAUL DUGUAY • ROMAN DZIOBA • HEIDI FINZGAR • LIONEL FRANCIS • DAVID FRASER • ALEX FRIEDLAENDER • RICK FURNISS • STEPHEN FYFE • GERRY GAUGLE • AMRITA GHAI • TAREK GHAZZAOUI • SHEENA GINGERICH • A.J. HACHMER • KENNETH HALCROW • JEFFREY HALPENNY • RYAN HALPENNY • IAN JACKSON • ANDREW JAGO • PHILIP JAGO • JASON JENSEN • ERIC GARTH JOHNSON • LIZ JOHNSON • THOMAS JOHNSON • NEIL JOHNSTONE • LYNES JONES • ERNEST JURY • RYAN KILPATRICK • JOHN LAND • MATHIEU LAROCQUE • JOHN LARSEN • GAIL BERNICE LEONARD • SUSAN ROSTON LEVY • JAMES LOHNES • ANDREW MARTIN • HEATHER MCLEOD • BRIGITTE MEUNIER • LISE MIGNAULT • MATT MONSON • WILLIAM MONUK • ROB MORE • ABBEY MURAWNIK • HAL MURAWNIK • JESSIE MURRAY • JOE MURRAY • JEEVITHAN MUTTULINGAM • THANASIRI MUTTULINGAM • BLAIR NEMROW • GIANG NGUYEN • PINAR OZDEMIR • MICHAEL PALMER • MICHEAL PARRIS • DONALD RAYMOND • NEIL ROBERTSON • GEORGES BARRIE ROBINSON • PATRICIA ROWAN • KEITH RUPERT • EMILY SANGSTER • FRANCESCA SLAVIK • CLAIRE SMOLIK • THOMAS ST-JULIEN • S.J. STONE • ALLEN TAYLOR • JOE TOSCAS • TONY TOSCAS • STELLA TSAI • BILL UPTON • GUILLAUME VADAMME • MATHEW VALLIS • MAURICE-ANDRÉ VIGNEAULT • DEREK VILIS • BONNIE VOISINE • BILL WEILER • CAITLIN WELLS • ALLAN WESTLAND • LAWRENCE WILCOX • DAVE WILLIAMSON

volunteers

**Canada Science and Technology Museum
Canada Agriculture Museum
Canadian Aviation Museum**

Public programming, collection and research, and corporate services activities continued to benefit from a dedicated volunteer corps. In 2000–2001, 309 volunteers performed 22,833 hours of service on behalf of the Corporation, and we are grateful for their continuing support, service and commitment to our museums.

CANADA AVIATION MUSEUM • WALLY ADAM • FRED ANTHONY • JOAN BABSTOCK • CHARLES BARIL • DAVID BATCOCK • GERRY BEAUCHAMP • DOUG BIESENTHAL • KEITH BISSET • DENNIS BISSON • KAREN BLAIS • BRYAN BOHAY • ED BOLTON • PHILIPPE BONNEVILLE • KEN BOYD • TRENT BRADFORD • JOHN BRADLEY • KATIE BRASCOUPÉ • FRANCES BROWN • RICHARD BRUGGER • JACQUES BRUNELLE • SID BURKE • DAVID BURT • JOAN BUSCHE • DOUGLAS CALDER • ANDY CAMPBELL • DOUG CAMPBELL • MICHAEL CANO • KEN CASTLE • ALAN CHAPMAN • DR. REG CHAPPEL • GEORGES CHEVALIER • ALAIN CHOUINARD • PAUL CHURCH • BILL CLARK • JERRY CLARK • LOUISE CLAXTON • WILLIAM CODY • GLENN COOK • JOHN CORBY • ISABEL CORCORAN • DON CRAIG • DOUG CUSHMAN • DAVID DARLING • GARY DAVIDSON • ARIEL DELOUYA • ANTHONY DENTON • SACHIV DHINGRA • PIERRE DOUCETTE • AUSTIN DOUGLAS • SHANNON DREW • PAUL DRZEMCZEWSKA HODSON • LOUIS DU TOIT • DENNIS EMOND • LUIS FARFAN • ALEC FOX • LIONEL FRANCIS • DAVID FRASER • CHUNRU (SALLY) GAO • MONIQUE GEISHARDT • ALLAN GERMUNDSON • DONALD GILCHRIST • WAYNE GILES • HARVEY GILLESPIE • STEPHEN GOOCH • RON GOULD • ANDY GRAHAM • SCOTTIE GRANT • LARRY GRAY • JOHN GRIFFIN • SETH GROSSMITH • KUNAL GUPTA • HUGH HALLIDAY • BARBARA HAM • DANIEL HANSEN • JOSEPH HARRISON • MARK HEYENDAL • ED HOGAN • ANDREW HOGG • ROBERT HOLMGREN • CAROL HOPP • GEORGE HOPP • BILL HOUGH • CLAUDE HURLEY • STAN JAKNUNAS • NEIL JOHNSTONE • DUŠAN JOVIĆ • LARRY JOYCE • ANTHONY KERR • BRUCE KETTLES • CHARLES KING • JAMES KING • FAHRI KIRMIZI • RON LACHANCE • LOUISE LAFLAMME • ANDRÉ LAFRANCE • JAMES LAING • JESSIE LAING • CLAUDE LALANDE • JEREMY LALIBERTÉ • DAVID LARKIN • GILLES LAROCHELLE • CLAUDE LEBLANC • PIERRE LEGAULT • EDWARD L'HEUREUX • JAMES LYON • GARTH MACDONALD • IAN MACLEAN • GHARAM MAHFOUZ • GRAHAM MANSELL • SAMANTHA MASSON • JEAN MCDERMOTT • MICHAEL MCGRATH • IAN MCKAY • JOHN MCMURRAN • DAVID MCPHAIL • BILL MCRAE • CHRIS MENDRISKY • ROBERT MERCIER • BOB MERRICK • TOM MILLER • RICHARD MILLETTE • ALEXANDRE MORIER • MURDO MURCHISON • BRYAN MURPHY • MIKE MURPHY • BOB MURRAY • LUC NADON • WILBERT NEAL • LEO NOILES • LEO O'DONOVAN • JANE O'DONOVAN • RAY PAQUETTE • JOHN PLUNKETT • GEORGE POPADYNEC • ANDRÉ POULIN • SEAN POULTER • GEORGE RILEY • KATHY RILEY • PAT ROBINSON • MICHAEL ROY • MIKE ROY • MIVILLE ROY • JAYANT RUPARELIA • STEVE RYAN • EMILY SANGSTER • MICHEL SASTRE • WAYNE SAUNDERS • FRED SHORTT • JOHN SIMPSON • GEORGE SKINNER • BOB SMITH • C.A.M. SMITH • KEN SMITH • POUL SONDERGAARD • DAVID (TIM) STAPLETON • JIM STEPHENSON • CHRIS STORY • ELAINE SUMMERS • MICHAEL TAILLON • STU TAIT • DAVE TATE • JACK THORPE • EMILY TIBAR • LOUIS TREMBLAY • BILL UPTON • SID VAN DYCK • MARTIN VAN SICKLE • ART WAHLROTH • CICI WAUGH • BILL WEILER • JIM WHITE • RICHARD WICKENS • GERRY WILKIE • CHRIS WILLIAMS-CHOWN • BRIAN YENDALL • HELEN YENDALL • ANDREY ZAKURDAEV • BILL ZUCK

CHAIRMAN'S MESSAGE

Photo: © Taylor Photography



During the past year, the Canada Science and Technology Museum Corporation and its three museums have successfully continued to show Canadians the role that science and technology have played in the building of this country. By preserving and interpreting Canada's scientific and technological heritage, and by making this knowledge accessible to Canadians and to the wider world, the Corporation fosters a sense of identity and pride in Canada's scientific and technological achievements.

The Board of Trustees was extremely pleased with progress made in 2000–2001 towards resolution of the serious accommodation issues which have faced the Corporation for a number of years. It is anticipated that, in the near future, the federal government will address a longstanding artifact storage problem at the Canada Aviation Museum, and will also make a commitment to begin consultation on a new public facility for the Canada Science and Technology Museum. On another front, the success of the Corporation's Web sites — as a means for disseminating information and facilitating public access to our scientific and technological heritage — has greatly enhanced the Corporation's ability to fulfil its national mandate. During the past year, the Board of Trustees also concluded the selection process for a new Director of the Corporation. Christopher Terry assumed the position of Director in February 2001, and the Board of Trustees looks forward to working with him to identify and implement the Corporation's strategic priorities in the years to come. I would also like to take this opportunity, on behalf of the Board of Trustees, to express our sincere thanks and appreciation to Geneviève Sainte-Marie for her contributions as Director over the past decade. During her tenure, the organization made a successful transition to Crown corporation, including the establishment of the processes and structure which have enabled us to adapt successfully to this new operating environment. Dr. Sainte-Marie also had to contend with the impact of the Government's budget reduction program, which placed considerable pressure on the organization and its staff over a number of years.

It is with pleasure that I submit the Annual Report of the Canada Science and Technology Museum Corporation for the year ending March 31, 2001, for tabling in Parliament, as required by section 150 of the *Financial Administration Act*.

A handwritten signature in dark ink that reads "Virender K. Handa". The signature is written in a cursive, flowing style.

Virender K. Handa
Chairman
Board of Trustees

DIRECTOR'S REPORT

This past year marked a watershed for the Canada Science and Technology Museum Corporation and its three constituent museums: for the first time in our history, virtual visitors outnumbered those we welcomed in person. This trend lent new impetus to our efforts to capitalize on public interest in what we offer. It also led us to look at the many ways in which we can marry this new strategic opportunity with federal initiatives aimed at connecting all Canadians to their heritage online.

The Corporation was also honoured this year by the Canadian National Railway Company's decision to house its extensive photographic collection at the Canada Science and Technology Museum. Recognizing the potential value of the collection to everyone from railway enthusiasts to schoolchildren, we quickly made a representative sample of the photographs available online, to considerable acclaim. We received similar praise for the rich online offerings of the Canada Aviation Museum, which began the third year of an innovative Web site partnership with Discovery Channel Canada.

Initiatives such as these are the wave of the future for Canadian museums, and the Corporation will continue to explore similar opportunities in the years to come. When taken together, virtual and onsite visitors to the Corporation's three museums totalled some 1.5 million people during the past year — an impressive accomplishment under any circumstances.

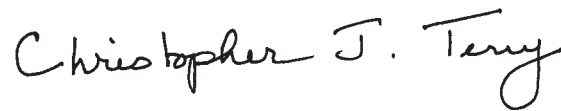
This past year, we received encouraging news in relation to the Corporation's physical facilities as well. We have indications, for example, that the longstanding issue of funding for an aviation storage hangar may soon be resolved. We are also pleased to note that increasing attention is being paid to the unsatisfactory conditions under which the Canada Science and Technology Museum currently operates. Housed for more than thirty years in a building originally designed as a bakery, the Museum facility is rapidly reaching the end of its useful life. Consideration of a new, purpose-built facility is highly desirable, if the Museum is to continue playing an appropriate role in federal policies designed to stimulate Canadian innovation, and the adaptation of Canadians to the complex, interconnected world of the twenty-first century. Our immediate future will be much concerned with this issue and its resolution.



Photo: © Taylor Photography

As the Corporation's newly-appointed Director, I am honoured to have been offered an opportunity to lead the Corporation through this exciting period. It is a period rich with 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. I look forward to working with our partners in the museum and heritage portfolio communities, and with other stakeholders, in order to maximize our ability to share our collections and research with audiences around the world. As a Corporation, we welcome initiatives which enable us to continue exploring historical and contemporary issues in science and technology, to honour Canada's scientific achievements and to provide entertaining learning experiences for visitors of all ages — and to accomplish these objectives using both traditional and electronic media.

None of this would be possible, of course, without the hard work and dedication of our staff, whose efforts contribute so significantly to our joint accomplishments. We are also deeply appreciative of the contributions of our significant and active volunteer corps, whose work adds so much to what we do, and of the support of our members and donors — whose moral and financial support speaks volumes about the esteem in which our museums are held. Support of this kind is priceless.



Christopher J. Terry

Director

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BOARD MEMBERS AND COMMITTEES

(as of March 2001)

Board Members

Chairman

Virender K. Handa

Vice-Chairman

Eric Lemieux

Members

Olga Barrat

Gail Beck

Jacques F. Brunelle

Faye Dawson-Flynn

Ron Foxcroft

Cos Gabriele

Patti Pacholek

Joachim Simard

Roger Soloman

Executive Committee

Chairman

Virender K. Handa

Members

Eric Lemieux

Joachim Simard

Christopher Terry

Audit Committee

Chairman

Eric Lemieux

Members

Gail Beck

Jacques F. Brunelle

Roger Soloman

Marketing Committee

Chairman

Ron Foxcroft

Members

Olga Barrat

Faye Dawson-Flynn

Canadian Science and Engineering Hall of Fame

Chairperson

Olga Barrat

Members

Cos Gabriele

Patti Pacholek



PERFORMANCE HIGHLIGHTS

Canada Science and Technology Museum Corporation

Heritage Preservation

Primary Activities

- Research, collection development and management.
 - The Canada Science and Technology Museum was selected as a repository for the historic Canadian National Railway photo collection. The collection has been officially designated “of national importance and outstanding significance” by the Cultural Property Review Board, and the museum will be placing approximately 1,000 images per year on a CN Images of Canada Web Gallery on the Museum’s Web site.
 - Renovations were completed on existing space to create a specialized state-of-the-art storage area for mixed media.

Sharing Knowledge

Primary Activities

- Museums, Web sites, publications.
 - The Corporation’s three museums attracted in excess of 735,000 visitors to their sites. Attendance targets at the Canada Agriculture Museum and the Canada Aviation Museum were exceeded by 19% and 8.5% respectively.
 - Visitor satisfaction levels significantly exceeded targets for all three museums, providing a positive endorsement of the exhibitions and programming offered.
 - The Museum Web sites attracted 912,000 visits, with the average length of each visit lasting nine minutes.
 - School programs remained extremely popular with students and teachers alike. Targets for the number of school visits were exceeded at the Canada Science and Technology Museum and the Canada Aviation Museum.

Support Activities

Primary Activities

- Facilities, revenue generation, administration.
 - The Corporation successfully negotiated a new collective agreement in March with employees represented by the Public Service Alliance of Canada. The agreement covers a two-year period ending March 31, 2002.
 - Funding was received to proceed with a much-needed administration building at the Canada Aviation Museum, which will provide proper staff accommodation, as well as an improved library and archive facility.

CORPORATE PROFILE

Legislative Authority and Mandate

The National Museum of Science and Technology, now operating as the Canada Science and Technology Museum Corporation (CSTMC), was established as an autonomous Crown corporation on July 1, 1990, with the passage of the *Museums Act*. The mandate of the Corporation as stated in the 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.

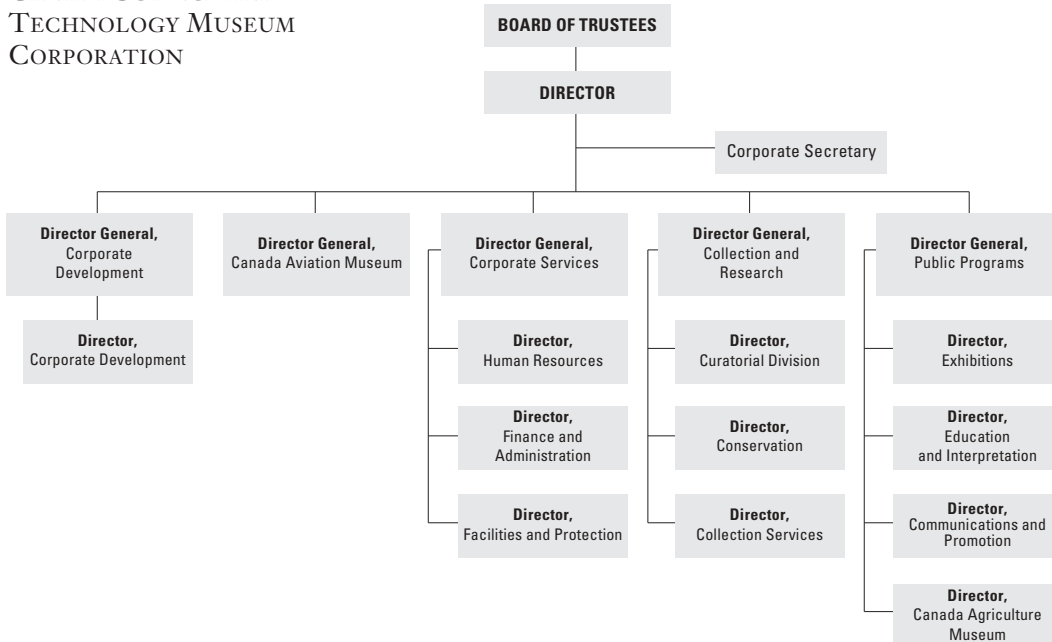
The mandate, powers and objectives of the Corporation are set out, in broad terms, in its enabling legislation. It is subject to Part X of the *Financial Administration Act*, which outlines the control and accountability framework for Crown corporations. The Corporation is ultimately accountable to Parliament, through the Minister of Canadian Heritage, and is part of the federal government's Cultural Heritage Portfolio.

Organizational Structure

A Board of Trustees, whose members come from all regions of the country and are appointed by the Governor-in-Council, oversees the management of the business, activities, and affairs of the Corporation. The Board has up to eleven members, including the Chair and Vice-Chair, and is supported by four committees: the

Figure 1
Organization Chart

CANADA SCIENCE AND
TECHNOLOGY MUSEUM
CORPORATION



Executive Committee, the Audit Committee, the Marketing Committee and the Canadian Science and Engineering Hall of Fame Committee. The Corporation's daily operations are managed by a Director, with support from a Management Committee, which includes the Directors General of Collection and Research, Corporate Services, Public Programs, Corporate Development, and the Canada Aviation Museum.

Corporate Governance

During the past year, the Board of Trustees exercised its authority, under the *Museums Act*, to select a new Director for the Corporation. A selection committee was established which included several Board members, as well as representatives from the Prime Minister's Office, the Privy Council Office and the Department of Canadian Heritage. The process was initiated in May and was completed in December with an announcement by the Minister of Canadian Heritage of the selection of Christopher J. Terry as the new Director, effective February 1, 2001. The overall process went very smoothly, and all Board members were involved in the final selection decision.

At its December meeting, the Board of Trustees reviewed and approved the Corporation's Corporate Plan for 2001–2002 to 2005–2006. The plan sets out the Corporation's objectives for its main activities, strategies to achieve these objectives, and performance indicators and targets.

The Board of Trustees convened a special session of the Board in February 2001 to discuss Board processes and practices, as well as to review *Chapter 18 — Governance in Crown Corporations*, a report prepared by the Auditor General of Canada. The Board agreed that a workshop on corporate governance would be beneficial to the Board as a whole, and arrangements were made to have a workshop held early in 2001–2002. The Board also used the meeting to begin work on Board job profiles, in response to a request received from the Privy Council Office to develop profiles for Board members of Crown corporations.

Historical Background

The Corporation manages three museums, which have evolved under individual circumstances.



Canada Science and Technology Museum

The Canada Science and Technology Museum (formerly operating as the National Museum of Science and Technology) opened in November 1967 at its present location, a 12.2-hectare site at 1867 St. Laurent Boulevard in Ottawa. It is the only comprehensive science and technology museum in Canada. The original museum building was constructed in 1964 as a bakery, although it was never fully used for this purpose. An addition to house locomotives was constructed prior to the Museum's opening in 1967. The property was leased until 1993, when the site was purchased by the federal government. Over the years, the building was gradually adapted to meet the needs of museum use, as well as to address health and safety concerns.

The Museum's collection of artifacts was initially acquired through the consolidation of several collections of technological artifacts previously held by the former National Museum of Man (now the Canadian Museum of Civilization) and several federal government departments and agencies. Over the years, collection storage space has been reorganized, and warehousing consolidated, around the St. Laurent Boulevard site.



Canada Aviation Museum

The aviation collection was first displayed at Ottawa's Uplands Airport in 1960 as a component of the National Museum of Man. Its focus was on bush-flying and early attempts to manufacture aircraft in Canada. In 1964, the collection was brought together at Ottawa's historic Rockcliffe Airport, combining the Canadian War Museum's collection of military aircraft from several countries — dating from the First World War to the 1950s — with a second collection of aircraft owned by the Royal Canadian Air Force, illustrating the history of the RCAF. This new, amalgamated and jointly-managed collection, then named the National Aeronautical Collection, provided a comprehensive perspective on the history and development of aviation, with a focus on Canada.

In 1967, the National Aeronautical Collection was brought under the wing of the National Museum of Science and Technology and, in 1982, its Rockcliffe site was officially named the National Aviation Museum. In June 1988, a new building for the Museum was opened at Rockcliffe Airport, providing a significantly improved environment in which to display and preserve most of the world-renowned collection. Although the facility did not address all of the Museum's requirements, it was the most that could be accomplished with funds available at the time. The need for additional space and amenities was recognized, and an acknowledgment made of the need for additional funding to house the collection properly. In 2000, the Museum changed its operating name to the Canada Aviation Museum.



Canada Agriculture Museum

The Canada Agriculture Museum is located at Ottawa's Central Experimental Farm (CEF). The agricultural collection, previously maintained by the federal Department of Agriculture at the CEF, was transferred to the National Museum of Science and Technology in 1979. In 1983, discussions with Agriculture Canada resulted in a co-operative project, which established the Agriculture Museum in a refurbished historic barn at the CEF. In 1995, a new agreement leased additional buildings to the Museum, and transferred equipment as well as ownership of the showcase herds.

The Museum, now known as the Canada Agriculture Museum, offers exhibitions on Canada's agricultural heritage, and on the benefits of agricultural research. It provides visitors with a unique opportunity to see diverse breeds of dairy and beef cattle, pigs, sheep, horses, poultry, goats and rabbits. Public programming activities include special weekend theme events, such as the Sheep Shearing and Fall Harvest Festivals, school programs, interpretive tours, demonstrations and joint efforts with community groups and associations.

External Business and Operating Environment

As a national institution and member of the federal government's heritage portfolio, the Corporation, along with other Crown corporations and agencies, plays a key role in preserving and protecting Canada's cultural heritage, while promoting and sharing knowledge about that heritage. The Corporation and its museums tell stories of Canadian ingenuity and achievement in science and technology, and demonstrate how these have contributed to the building of Canada. Through its activities, the Corporation strives to engage Canadians and the world in active learning about this scientific and technological heritage.

In its January 2001 Speech from the Throne, the federal government laid out objectives for its third mandate and the new millennium. It recognized, among other things, that it is important to show Canadians who they are, thus bringing them together as a nation. It is also important to celebrate Canada's achievements and history, while providing access to this heritage. The Corporation supports these objectives by preserving and interpreting Canada's scientific and technological heritage, and by sharing this knowledge with Canadians — especially children and youth — and the wider world. The federal government has also made a commitment to deliver key government services electronically to all Canadians by 2004, and the Corporation is working to increase its digital content, while contributing to the achievement of Government On-Line objectives.

The Corporation has many strengths which contribute directly to its competitive advantage. One of these is the richness of the national collection and the knowledge-base developed from the study and research of that collection. The aviation collection is one of the best of its kind in the world, and the quality of the Canada Aviation Museum's restoration work is internationally recognized. The Aviation Museum's library likewise houses the finest collection of its kind in Canada, and is dedicated to fostering an understanding of the role aviation has played in Canada's history, while highlighting Canada's exceptional contribution to the development of aviation worldwide. The collection of the Canada Science and Technology Museum is recognized for its comprehensive depiction of Canadian achievements and innovations in science and technology. The communication and transportation collections are particularly noteworthy in this respect. The Canada Agriculture Museum presents the unique offering of a working farm in the city, and features interpretive programming with live animals.

The Ottawa-Hull metropolitan region is one of the most competitive environments in Canada in terms of onsite visitors to cultural and heritage institutions. In addition to professional sports teams, a host of urban and rural recreational possibilities, and the national seat of government, the region boasts eight major museum/gallery institutions. In addition, the recent trend towards the establishment of commercial entertainment centres, such as multi-service movie complexes, has increased competition for local audiences. In such a competitive market, understanding the audience, creating "top of mind" awareness, and building a credible, coherent brand image are the keys to success.

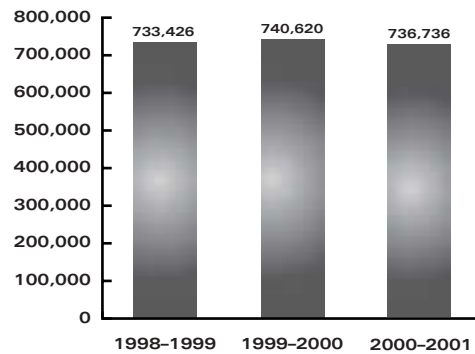
The Corporation's competitive disadvantages in this market stem from the nature of many of its facilities, and their physical location outside the downtown core. The Corporation's museum buildings also lack the full range of amenities appropriate to

their function, which has limited opportunities to generate revenue through such activities as facility rentals and sponsorship. Despite these limitations, the Corporation's three museums continue to attract high numbers of visitors: a very positive endorsement of the exhibitions and programming they offer. The Corporation attracts approximately 25% of museum visitors to the National Capital Region while receiving the smallest federal allocation of the four national museum corporations, at only 17% of the annual budgeted total.

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

The Corporation has been able to capitalize on its vast and unique asset base for the purposes of electronic outreach, adding research to create greater value for its audiences. There is every indication that the demand for such applications — especially those with Canadian content — is likely to increase as use of the Internet expands both in Canada and abroad. It has also become clear that there are no other Canadian scientific or technological institutions with the collection or curatorial strengths of the Corporation, giving the Corporation a competitive advantage in the development of initiatives which explain the evolution of technology in a Canadian context. Conversely, the demand for these new products increases pressure on the Corporation to allocate resources to this new platform, while still maintaining its investment in the physical museum sites. Adequately meeting requirements in both areas will be difficult, given current resource levels.

Figure 2
CSTMC Attendance



HERITAGE PRESERVATION

Research

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

Research generates the knowledge required to help the Corporation make informed decisions regarding the content of the collection, as well as providing a knowledge-base which is shared through exhibitions, Web sites and publications.

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.

Central to the research program is the identification and analysis of important concepts, ideas 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.

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.

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 the research into manageable parts.

The Corporation conducted a systematic program of historical research, along with collection-based research, because both are required to guide collection development and provide basic information for exhibitions, interpretive programming and Web presentations. Historical research projects completed this past year are shown in Figure 3.

Figure 3
Historical Research Plan 2000–2001

Major Subject	Topic	
Communications	Radio	(incomplete due to lack of research time)
	Signs (Web)	Completed
Natural Resources	Mining	Completed
	Power Generation (Exhibition)	Completed
Renewable Resources	Forest Fire Technology (Exhibition)	Completed
Scientific Instrumentation	Space (Exhibition)	Completed
	Space	Completed
Transportation	Snow Vehicles	Completed
	Road Construction	Completed
Aviation	Ballooning in Canada	Completed
	Retrospective on the Future (Exhibition)	Completed
	1909: An Illustrious Year	Completed
Multi-Disciplinary	Hall of Fame (Exhibition & Web)	Completed

The Collection

A major challenge for any museum is to determine what items it will collect, how the collection will be organized, and how to preserve these 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 Canadian 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.

Development

The primary purpose of the collection is to help people understand the transformation in Canadian life which has resulted from science and technology. A focussed collection is achieved by identifying and acquiring the objects and supporting documentation which best reflect a historical framework, and by removing or deaccessioning materials

that are not consistent with this framework. It is also essential that all documentation be managed in a professional manner, permitting retrieval and adaptation to a variety of media. Adherence to strict environmental standards and professional conservation activities are also requirements, to ensure the long-term preservation of the collection.

Collection development activities utilize historical research to assist the Corporation in making informed decisions on collection content. Following completion of the historical assessment, collection assessments are prepared in three sections: the ideal collection, a profile of the existing collection, and the needs of the collection. The latter is obtained by comparing the ideal collection to the collection profile, which identifies artifacts or classes of artifacts to be acquired. During the year, a new approach to the production of data for collection assessments was developed by Curatorial and Collection Services staff. This will significantly reduce preparation time, and will facilitate completion of future assessments. In addition, assessments for sound recording and reproduction, astronomy and bicycles were completed.

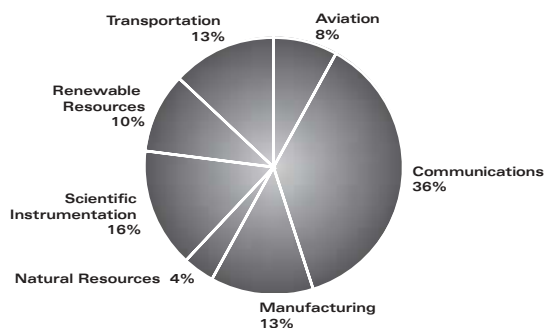
Figure 4
Collection Assessment Plan 2000–2001

Major Subject	Topic	
Communications	Television	Completed
Natural Resources	Electric Lighting (replacing fossil fuels)	Completed
Scientific Instrumentation	Astronomy	Completed
Transportation	Automotive	Completed

The collection now consists of over 1.4 million items, including 32,913 artifact records (averaging 2.2 items per artifact record); 33,066 pieces of catalogued trade literature; 85,350 catalogued photographs; and over 36,000 engineering drawings. Most of the balance is made up of uncatalogued photographs and engineering drawings.

Artifact acquisitions during the year numbered 608. Acquisitions of particular interest included 32 linear feet of shelving containing Royal Canadian Air Force (RCAF) and Canadian Forces aircraft archival material (aircraft movement records known as Quartermaster's Transfer Orders), dating from the 1940s to the 1990s; the John Ellis collection of archival material, including 5,400 photographs, pertaining to the Canadian Civil Aircraft Register 1920–1945 and beyond; a set of 14 watercolours by aviation artist Robert W. Bradford, commissioned in the late 1950s

Figure 5
Collection Subject Areas





Watercolour of the DeHavilland Canada DHC-2 Beaver, painted by artist Robert W. Bradford.

recording studios; a basis weight paper scale produced in 1927 by E.J. Cady of Chicago Ill., U.S.A.; a 1920 sleigh manufactured by A. Horne & Co. of Charlottetown, P.E.I., donated by Agri-Food Canada, Nappan, N.S.; a “New Williams” sewing machine of the 1910–1920 period, a product of W.C. Williams & Co., Montreal, Quebec; a collection of instruments (1920s–1980s) used in the development of the fire-danger rating system in Canada, transferred to the Museum by the former Petawawa National Forest Institute; a 1950s Canada Cycle & Motor Co. Ltd. “Flyer” bicycle frame made of Reynolds 531 tubing from an Edmonton, Alberta bicycle shop; a model of Canada’s Radarsat II — the parent of which, when in place, will succeed Radarsat I as the most powerful earth observation satellite in the world; prototype ultrasound apparatus of 1987, the first of its kind in Canada, and used in Montreal for diagnostic breast ultrasounds; a prototype Brewer Ozone Spectrophotometer developed at the University of Toronto in 1968–1969 — a Canadian innovation for measuring levels of ozone in the atmosphere and now used worldwide — and an early production

by Mr. Robert G. Halford, editor of the Canadian monthly magazine *Aircraft and Airport*; 281 photographs of 1929–1931 civil aviation developments in Canada from the archives of the monthly magazine *Canadian Aviation*; a St. Lawrence Skiff crafted by Sauvé Bros. of Brockville, Ontario, ca. 1890 — one of the most famous recreational boats and a product of the great outdoor recreational boom of the late 19th century; a collection of 2000 pieces of agricultural implement company trade literature from 1890–1970; a 1929 Caterpillar Tractor, Model 15, used for farm work in the region of Rosetown, Saskatchewan; an Interactive Pager 960 (“BlackBerry”) manufactured by Research in Motion Inc., Waterloo, Ontario — a 1999 Canadian development which contributed to the growing field of wireless data communication; a 1985 AMS Audio File disk recorder produced by Advanced Music Systems, U.K. — the first commercially-successful digital disk recorder, and widely accepted by Canadian broadcast and



An addition was made to the collection of an 1929 Caterpillar Tractor, Model 15, used for farm work in the region of Rosetown, Saskatchewan.

model produced by SED Systems Ltd., Saskatoon, Saskatchewan, both donated by Meteorological Services of Canada; an Atomic Force Microscope developed by Manfred Jericho at the Dalhousie University of Physics Dept., Halifax, N.S. in 1986, and used to measure the material structures of molecules.

Management

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

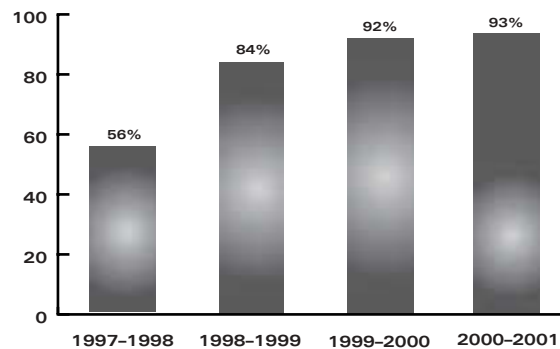
Record-Keeping

The Corporation maintains proper records for each item from three perspectives: location and current museum use, history of the item, and condition. The Corporation maintains rigorous 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. Documentation 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, operability, history of owners, and use is prepared in a standard format for computerized storage and retrieval.

Much progress was made in addressing the cataloguing backlog, which developed between the formation of the Museum in 1967 and the late 1970s, when artifact collecting was virtually unrestricted, and the computer was not yet available as a collection management tool. Notable among the artifact groups worked on this year were aviation, communications, photography and agriculture.

Cataloguing activity for the year saw 930 artifacts catalogued, 207 documented, 183 re-catalogued and/or enriched, 6,786 artifact records modified and 1,171 pieces of trade literature catalogued. Numbers of artifacts being catalogued dropped this year, due to the retirement of one of our three cataloguers and the length of time required to replace and train a replacement, as well as an emphasis on cleaning up older artifact records in preparation for transfer of the database to the newly-acquired collection management software system. Despite this, the percentage of artifacts catalogued to CSTMC standards was on target at 93%.

Figure 6
Percentage of the
Collection Catalogued to
CSTMC Standards



Conservation

Conservation reports are required for each object, in order to evaluate the physical condition of artifacts and to define long-term conservation requirements. Conservation reports were completed for 300 artifacts during the year. Conservation reports are intended to be a state-of-the-collection health checklist that will identify any type of threat to an artifact, in time for remedial action to be taken. This reporting provides a benchmark for the condition of an object when it was initially evaluated, and following each subsequent use — whether in an exhibition, a program, or for loan purposes. Due to limited resources, the completion of conservation reports remains a problem, with a significant backlog of work to be done. Preventative conservation, preservation and restoration are also important collection conservation activities.

The Corporation has introduced environmental standards for collection storage in the areas of lighting, heating, humidity, security and maintenance — all of which are used to determine how the collection should be housed and exhibited. Based on conservation recommendations, a new storage area was completed to house the Canada Science and Technology Museum's paper- and film-based artifacts, which include technical drawings, photographs, magnetic media and industrial transfers. A relative humidity control module developed by the Canadian Conservation Institute was purchased to supply conditioned air to storage cabinets in the new storage area.

Figure 7
Percentage of Collection with a Conservation Report Completed

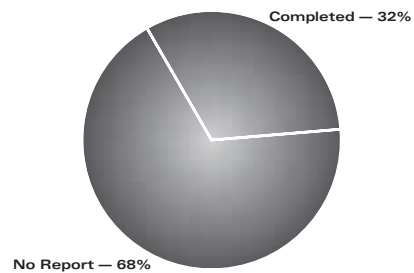


Photo: S.S. Nagoya Co., Ltd.

Photo depicts *Karsh* installation at the Nagoya/Boston Museum of Fine Arts, featuring Yousuf Karsh's studio camera on loan from the Canada Science and Technology Museum.

Conservation efforts during the year included preserving and conserving artifacts, and supporting new exhibitions at the Canada Science and Technology Museum. These included **Canoes: The Shape of Success** and completion of a travelling version of the **Bikes: The Wheel Story** exhibition. Preparation of artifacts began on two new exhibitions, **Innovation in Canada**, and **Tractors**, which will open at the Canada Agriculture Museum. Upgrades to several exhibits were completed at the Canada Aviation Museum, including the Front Lobby and the World War I Island in the Walkway of Time, as well as the new **Retrospective on the Future** exhibition. The restoration of a 1929 Travel Air 2000 began this year, and will be installed on the Canada Aviation Museum's Recreation Island when restoration is completed in 2004. Artifacts were also prepared for seventeen interpretation programs at the three museums, including demonstrations of a 1918 Sawyer-Massey tractor, music boxes, a working model of a family-run ice-cutting business which operated on the Ottawa River during the first half of the twentieth century, and aircraft which include a Hawker Hind and a Harvard IV. Over 200 artifacts were also prepared for loan to various museums and institutions, including international exhibitions in London, Glasgow, and Nagoya.

SHARING KNOWLEDGE

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 relationships between science, technology and Canadian society.

The Corporation seeks to engage Canadians in discovering, considering, and questioning past and present developments in science and technology, and their impact on society and individuals. The Corporation fosters a sense of identity and belonging for 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 Corporation disseminates knowledge to its audiences in three primary ways: through its museums, its Web sites, and its publications.

Museums

The Corporation manages three museums for the visiting public. The ultimate purpose of a museum is to provide its visitors with learning experiences, and the Corporation builds on the unique characteristics of its three museums to shape this experience. Museums are places of informal, self-directed learning, imparting knowledge, encouraging curiosity, and contributing to learning at every stage of life.

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

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

Museums traditionally offer exhibitions to visiting audiences, complemented by interpretation activities. In selecting exhibition and program ideas, preference is given to those that afford the best opportunity to utilize curatorial expertise and display artifacts from the collection, while appealing to existing and/or potential visitors. Exhibition topics are selected, based on the range of experiences they afford, and must be thought-provoking, invite discovery, and allow for the acquisition of the widest possible range of knowledge.

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



Canada Science and Technology Museum

Exhibitions

The Museum's exhibition renewal plan resulted in the presentation of one new temporary exhibition entitled **Canoes: The Shape of Success**. Since the exhibition's opening in June 2000, visitors have discovered how early commercial canoe-builders helped people answer "the call of the wild" while, in the process, building a Canadian icon. The exhibition explores how the simplicity, elegance and efficiency of the canoe's design led to its commercial success, and made it universally recognized symbol of Canada.

The exhibition is presented in two sections. "Making the Shape" examines the inherent qualities of the Canadian canoe shape, as well as the salient tools, materials and techniques used in commercial production. "Shaping a Symbol" shows how the active promotion and widespread commercial popularity of the canoe in Canada contributed to its evolution as a cultural icon. The unique and nationally-significant Rice Lake Collection, which has received "cultural property" designation, was acquired by the Museum in 1994, and forms the foundation of this exhibition. The collection consists of patterns, moulds, tools, order books, a ledger and pay book, award certificates from world fairs, photographs and promotional materials.

Long-term exhibitions are updated on a regular basis to maintain visitor interest, and to ensure that exhibitions remain current, both in content and method of presentation. Updates take into account all available information such as visitor comments, survey results, maintenance issues, and any commitments to exhibition sponsors. During the past year, updates of two long-term exhibitions were completed:

- **Love, Leisure and Laundry** was modified to improve its overall layout, presentation of artifacts, and presentation of interactive units.
- **Connexions** was modified to refresh several elements of the exhibition, and to add new graphics and text elements. Content was changed to make the exhibition more current. Some artifacts were removed and replaced to reflect recent developments. One section of the exhibition is in the process of being completely revised and updated, with the assistance of a private-sector partner.

Figure 8 Canada Science and Technology Museum Exhibition Plan 2000–2001

Exhibition	On Schedule	On Budget
Canoes: The Shape of Success	No*	No*
Love, Leisure and Laundry (<i>Update</i>)	Yes	Yes
Connexions (<i>Update</i>)	Yes	Yes

* Both schedule and budget were affected by staff turnover.

Many of the Museum's existing travelling exhibitions are reaching the end of their life cycles, having been exhibited extensively throughout Canada over the past several years. As a result, only one of these older travelling exhibitions — the **Canadarm** exhibition — was presented this year at two venues. Taking into account the high demand across Canada for small travelling exhibitions with interactive components, the

Museum is designing new small exhibitions which will travel. These exhibitions will be presented first at the Museum itself, then will travel across Canada. An example of this type of exhibition is **Bikes: The Wheel Story**. It was presented at the Museum in 1998 and 1999; its touring schedule was launched in May 2000 with a presentation in Whitehorse, Yukon, followed by a second one in Valcourt, Quebec.

Interpretive and School Programs

The Museum offered a number of special public events to supplement its regular program of demonstrations, tours and workshops. Summer camps continued to be highly successful, with a new camp “Adventures in Science” added to the popular Junior and Senior Astro Camps. Other programs such as Tiny Tots, Museum Sleepovers and Birthday Parties continued to grow in popularity, with revenues exceeding expectations. Special weekends, aimed at complementing and supporting exhibition messages or corporate objectives, included this year’s Canoe Weekend and “Proud to be Canadian”. Several new outdoor initiatives were also undertaken, with the goals of generating attendance in new markets and increasing media opportunities. Family Fun Fest was a free outdoor event which targeted local neighbourhoods. Field Days 2000 was a joint venture between two amateur radio groups from two provinces, meeting to establish a new Canadian record for the most concurrently operating radio stations. Events offered in conjunction with community groups included Model Mania, The Evolution of Wheels and Jaguar: Concours d’élégance.

Canadian Science and Engineering Hall of Fame

The Hall of Fame promotes role models who will attract young Canadians to careers in science, engineering and technology. This past year saw the induction of two new members into the Canadian Science and Engineering Hall of Fame.



Dr. Douglas Harold Copp, an astute medical researcher and gifted teacher, counts among his scientific contributions the discovery of calcitonin — a hormone used in the treatment of osteoporosis, and taken by cancer patients to relieve pain.

Dr. Harold Elford Johns was one of the founders of medical physics. His most obvious achievement was the development of the cobalt-60 cancer therapy unit in 1951. The cobalt bomb, as it is known, revolutionized the treatment of cancers located deep in the body, where previous radiation therapies had proven ineffective. It has been estimated that seven million people have benefited from cobalt-60 therapy worldwide.



In December, the Museum hosted a direct downlink transmission from the space shuttle, *Endeavour*, with Canadian astronaut Marc Garneau on board. The Honourable John Manley, accompanied by media and over 200 students from across Canada and many media, attended this special event, in which Minister Manley also read questions to Dr. Garneau from youth across Canada.

Other events organized by the Museum included exhibitions promoting the diverse roles of engineers during National Engineering Week. Backyard Astronomy courses for both families and adults continued to be popular, and saw an attendance increase of 11%. The Museum was again host to the Canadian National “Marsville” program, featuring a cross-Canada video conference for participating students.

A summer outdoor program included the operation on the Museum’s railway siding of the Shay — a geared steam locomotive originally used in the British Columbia forestry industry — water rockets, and demonstrations at the Cape North lighthouse.

In order to meet demand and foster repeat visitation, school programming continued to include self-guided programs and flexible scheduling. Several new programs were added to the existing selection. New educational programs launched in September — including Earth’s Daily and Seasonal Cycles, Forces Acting on Structures and School Days — proved immensely popular. The new teachers’ program entitled “Discover the Museum Days” promoted the rich resources of the Museum in support of school curricula, greatly enhancing the reputation of the Museum’s educational programs. Special school programming such as Curriculum Days and Fun Days continued to be well received by teachers and students, with 4,113 attending the Spring and Fall sessions of Curriculum Days alone.

Attracting Visitors

The Canada Science and Technology Museum attracts an average 400,000 visitors per year. This year’s visitor attendance was slightly below target, but well within the acceptable range.

In order to reach potential visitors both within and outside the region, the Museum administers an active media relations program. Maintaining a national media presence is one of the communications goals of the Canada Science and Technology Museum, and in 2000–2001, the Museum received exposure in national English print media, including the magazines *Maclean’s*, *Saturday Night*, *Equinox*, *Canadian Family* and the newspapers *The Globe and Mail* and *The National Post*. French-language audiences across Canada received information about the Museum through print reports in *Clin d’œil*, *Enfant Québec* and *La Presse*. National exposure was also received via TV and radio in English



Photo: © Canadian Space Agency 2001

The Honourable John Manley, Minister of Industry, speaks live on screen with Canadian astronaut Marc Garneau, aboard the space shuttle *Endeavour*, during the downlink ceremony at the CSTM.

media (CPAC-TV; CBC-TV's *Life and Times* series, *Newsworld*, and *The National*; Global Television and the Discovery Channel) and French media (Radio-Canada and TFO). Releases are also posted on the Museum's Web site, making them available to the media as well as the general public.

Canada Science and Technology Museum subjects that caught the interest of national media this past year were CN Images of Canada, Hall of Fame inductees, **Canoes: The Shape of Success**, the Canadian Space Agency downlink with Canadian astronaut Marc Garneau, and the launch of the Government of Canada Web site with Prime Minister Jean Chretien. It is estimated that this last event alone achieved a media reach of over 4 million.

Figure 9
Canada Science and Technology Museum Attendance

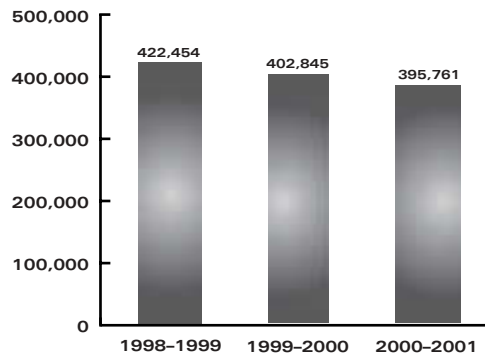


Photo: Serge Fournier, Office of the Prime Minister



The Right Honourable Jean Chretien addresses the audience at the launch of the Government of Canada Web site held at the Canada Science and Technology Museum.

Over the year, the Canada Science and Technology Museum was referred to in 310 print media articles and listings. Of this number, about two-thirds (197) were local media, with the remaining coverage spread across nine provinces. Compared to the 253 total "print hits" received last year — of which 208 were in local papers — the amount of non-local and interprovincial coverage has increased significantly.

In addition to an active media relations program designed to raise awareness, a targeted advertising program helped

the Museum reach its attendance goals. Strategies used in the advertising program included the use of campaigns, rather than the promotion of isolated events, in order to concentrate media weight. The use of a brand-based approach to all communications resulted in a consistent format and reinforcement of messages. Establishing and adhering to guidelines has resulted in media buys that carry sufficient reach and frequency to have a measurable impact. The media mix is also strategically chosen, and has most typically included a combination of radio and print buys.

Another key element of promotion included review of the Museum's name, logo and slogan. This involved creative effort and marketing research. The resulting name "Canada Science and Technology Museum" captures the Canadian essence of the institution, which is particularly important during these days of increasing electronic outreach. The new slogan, "Discover a heritage rich in innovation" reflects both the past (heritage) and future (innovation). The logo was deemed appropriate and on brand, and therefore was not changed. These creative elements are actively used on all promotional materials, providing consistent imagery and building awareness.

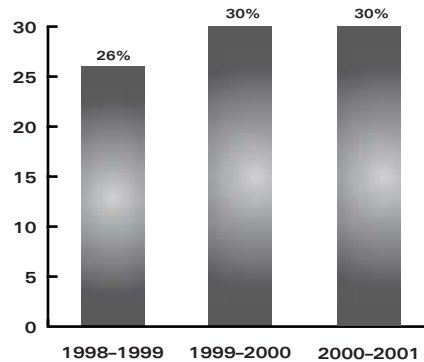
The Canada Science and Technology Museum was promoted directly to the end-consumer, as well as business-to-business. Examples of the latter include promotions targeted to schools and edu-tour operators, via marketplaces and joint promotions with other institutions, thus minimizing costs. Strategic participation in joint campaigns launched through the National Capital Commission, the Ottawa Tourism and Convention Authority, Attractions Ontario, the Canadian Tourism Commission and others, provided economies of scale in reaching both local and non-local targeted audiences. Through ads placed in Via Rail's passenger magazine and lure brochures distributed throughout Ontario, local and non-local audiences learned about the Museum's offerings. In order to drive local attendance for weekend events and programs, the Communications and Promotion Division coordinated promotions with the Membership Office, and launched e-mail campaigns. Use of the latter is intended to grow, as e-mail provides a personal, timely, and low-cost way to keep audiences informed.

Reaching out to local and non-local communities was achieved through presence at nine festivals and events, with approximately 2,500 people enjoying the Museum's demonstrations. Passes to the Canada Science and Technology Museum were also offered to targeted audiences, with a view to expanding the Museum's visitor base.

Overall, attendance by school groups accounted for 30% of total visits. This high proportion of students was due, in part, to new programming initiatives such as Curriculum Days, partnership activities, and increased promotions to schools — including the use of a more comprehensive teacher database that permits mailouts to individual teachers.

Teachers participating in school programs continued to indicate high levels of satisfaction. The high quality of programs and educational staff were often mentioned. Teachers particularly appreciated links to the school curriculum, and the way in which the Museum's programs extend the classroom experience.

Figure 10
Number of Visits Resulting from School Groups



Visitor Satisfaction

Visitor satisfaction is of prime importance to the Museum. Exhibitions and programs are evaluated at various stages, in order to assess how informative, interesting and relevant they are. This has resulted in constant improvement to exhibitions and programs, and a 92% satisfaction rating among visitors — much of which can be attributed to significant exhibition and program renewal. Visitors continue to be impressed by the Museum’s hosts and guides, and their knowledge of the Museum and its exhibitions. Visitors have also responded well to increased levels of weekend programming.

Figure 11
Teacher Satisfaction —
“Overall, I am satisfied with
my visit.”

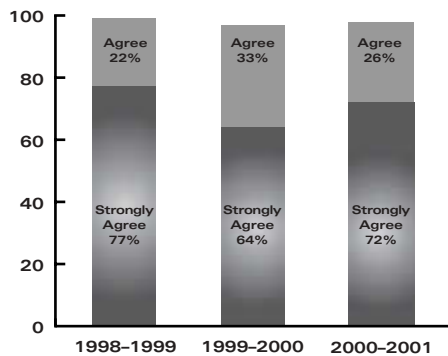
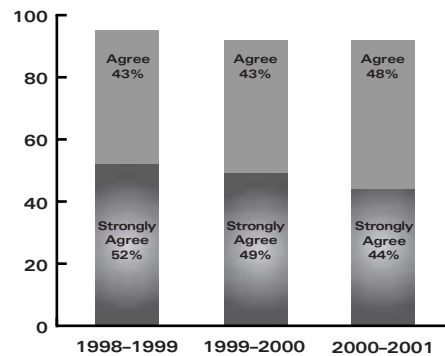


Figure 12
Visitor Satisfaction —
“Overall, I am satisfied with
my visit.”



Canada Aviation Museum

A museum with a focussed collection like that of the Canada Aviation Museum faces special challenges as it endeavours to ensure its continued public appeal. For this reason, over the past few years the Museum has implemented small-scale promotable change as a way of developing a greater sense of dynamism in the institution. This approach is reflected in every area of public programming activity, through exhibitions, electronic outreach, and interpretive and community programs. Successfully integrating these varied disciplines to appeal to a variety of audiences has been a constant hallmark of the Museum’s public programs.

Exhibitions

The exhibitions program for 2000–2001 was undertaken on budget, while still meeting the museum’s goal of providing variety in the Museum’s public areas. Exhibitions were marked by a continued emphasis on creative approaches and further integration and involvement of all areas of the museum in exhibition projects.

The Canada Aviation Museum continued its look at the first century of powered flight with this year’s primary exhibition **A Retrospective on the Future**, which opened in June 2000. This attractive and entertaining exhibition examined how people looked at

Figure 13
Canada Aviation
Museum Exhibition
Plan 2000–2001

Exhibition	On Schedule	On Budget
Bush Flying I — Update * —
Artflight 2000 Yes Yes
A Retrospective on the Future	... Yes Yes

** Note: a decision was made to postpone this update to next year.*

aviation technology throughout the twentieth century, as they tried to predict where it would go next. The major artifact of the exhibition was the Fulton Airphibian, a 1950s flying car borrowed from the National Air and Space Museum in Washington, D.C. This extraordinary aircraft will remain on display at the Canada Aviation Museum for at least three years.

The Museum’s other major exhibition was **Artflight 2000**, a second foray into aviation art as expressed through photography. This juried competition and exhibition was much larger and more successful than the Museum’s first attempt to showcase aviation photography. The experience the Museum has gained through these efforts suggests that, while it may take some time to establish the photography competition, the Museum’s decision to alternate painting and photography competitions will foster excellent work by Canadian artists in both media.



Opening of Artflight.

L. to R.: Francine Poirier, A/Director, CAVM; General Maurice Baril, Chief of the Defence Staff; Mauril Bélanger, MP Ottawa Vanier; Christopher Terry, Director, CSTMC; Dr. Gail Beck, Board of Trustees, CSTMC; Marc Ducharme, Registrar, CAVM.

Given a full schedule of upcoming exhibition projects, the Museum decided to slow its schedule of exhibition improvements and updates by postponing the implementation of the Bush Island I project to 2001–2002. The entire schedule of permanent exhibition updates has been extended, in order to pursue a more efficient approach. In addition, review process for future updates was refined, enabling review of the Second World War Island to be undertaken.

A number of smaller, long-awaited exhibition projects came to fruition this year, including improved interpretation for many artifacts, such as the fine collection of models on display. An original First World War aircraft, the Spad 7, was returned to that section of the Museum after an extended absence. The difficulties in creating space for important artifacts such as this continued to challenge museum staff. Although the envelope was successfully pushed this year, the limit has almost been reached — even for smaller displays and objects, such as the “time capsule” installed in cooperation with the RCAF to mark its 75th anniversary. This cabinet, which contains air force squadron memorabilia, will be reopened on the centenary of the RCAF in 2024.

Interpretive and School Programs

The teacher satisfaction rate remains high at the Canada Aviation Museum at 95%, with twelve school programs offered during the past year. Two of these address the specific needs of the Ontario Science and Technology curriculum. The School Ambassador program also continues to grow, offering an opportunity for the Museum to liaise with teachers across the region. In addition, professional development days held for teachers of the Ottawa-Carleton District School Board continued to be well received.

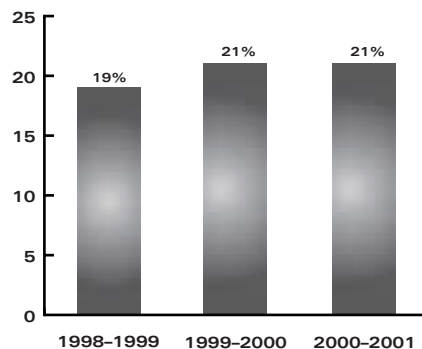
The Museum's programs target toddlers, children, youth, adults and seniors, and have been developed in an informative yet entertaining format. These programs also generate substantial revenues and visibility for the museum. Sleepovers and an evening program, *From the Ground Up*, for groups such as Scouts, Guides, Brownies and Cadets, have increased in popularity again this year, welcoming 4,200 participants. The Department of National Defence has helped to promote these programs to cadet squadrons in Ontario and Quebec and, in many cases, the cost of the program has been covered by local cadet detachments. Week-long camps offered throughout the summer at three different levels continue to be very successful, with 505 participants this year. Full Flight — an introduction to aviation ground-school training — is offered to adults at the Museum on evenings and weekends by reservation only. This program is being promoted by Nortel to its employees in their *Wellness* newsletter. Three programs which showed a substantial increase in participants and revenues this year were *Onwards and Upwards* — a corporate team-building program; *Vintage Flying Experience* — a unique opportunity to experience flight in a Stearman, Chipmunk or Beaver aircraft; and birthday parties for children from toddlers to teens. These programs are well received and create excitement and enthusiasm for Canada's aviation history.

Ongoing program series for children and their families — *Sky Stuff*, *Junior Ground School*, *Round the Pole*, *Skyworks* and *Super Sundays*— continue to draw enthusiastic participants, as do two weeks of special programming during the holiday season and at March Break. Special events ranged from the *Battle of Britain Ceremony*, *Seniors' Tea and Tour*, charity *Fun Fly Days* partnered with the *Rockcliffe Flying Club*, and *Things That Fly in the Night*, a family Halloween celebration. Canada Day remains the Museum's biggest day, with thousands of visitors enjoying free admission, access to some of the larger aircraft, and numerous activities for all ages. Other special programming included three aviation book launches by noted area authors, and a one-woman theatrical performance by Diana McIntosh.

Attracting Visitors

In an increasingly competitive arena, attracting and maintaining visitors is a long-term challenge. With a clear positioning strategy, backed by an aggressive promotional campaign in electronic and print media and the establishment of a brand identity, marketing efforts further incorporated the Museum's new name and

Figure 14
Number of Visits Resulting From School Groups

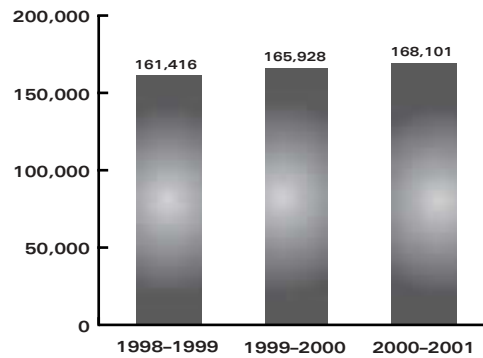


continued efforts to position and target the Museum's wide range of products. This focus greatly assisted the increase in visitor attendance.

Combining proven methods of print and electronic media with new targeted promotional partnerships has enabled the further attraction of both traditional and non-traditional museum visitors. The Canada Aviation Museum has products which appeal to growing markets, such as the region's high-technology sector, and is now well-placed to capitalize on many promotional opportunities.

Special events were held throughout the year as a way of encouraging return visitation. The Museum was also selected, for example, as a venue on the itinerary of British Prime Minister Tony Blair during his 2001 state visit to Ottawa. Public relations events such as exhibition openings are also used as a means of developing relationships within important constituencies such as tourism, the aviation industry and the federal government.

Figure 15
Canada Aviation Museum Attendance



Mrs. Cherie Blair and The Right Honourable Tony Blair, Prime Minister of the United Kingdom, on tour at the Canada Aviation Museum, with Christopher Terry, Director of the CSTMC; official party guests; and Dr. Virender Handa, Chair of the CSTMC Board of Trustees.

Continued coverage in various media — including local, national and aviation publications — complement ongoing marketing efforts. More importantly, they often provide a forum which highlights the Museum's significant collection, research and outreach activities. Developing a reputation for responsiveness and providing access to expert aviation historical information has permitted the development of media relationships which continue to open new avenues for communicating the Museum's messages and reaching wider audiences.

The continued development of the Canada Aviation Museum as a unique and viable venue for hosted

events was a priority this year. Facility rentals not only provide substantial revenues for the Museum, but also introduce a new clientele who may not otherwise pay a visit. Quality companion programming such as team-building exercises, children's workshops and vintage flying experiences was made available to event planners for their guests, and was received with great enthusiasm. Clients this year included Canada Post Corporation, and the Aerospace Industries Association of Canada.



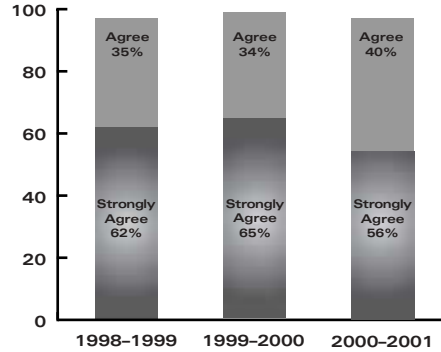
Over 5,200 people attended a variety of functions, both large and small.

Visitor Satisfaction

The Museum endeavours to ensure that people find their visits welcoming and enjoyable, informative and worthwhile. Public amenities are monitored for suitability, cleanliness and efficiency. Staff are trained and encouraged to be attentive to visitors’ needs. Programming, events, exhibits and interpretive activities are considered with a view to quality and to meeting a wide range of audience interests.

Surveys undertaken during the peak visitation periods of August, December–January, and during March Break programming indicate that the level of visitor satisfaction remains very high at 96%. The Museum’s “fun” factor was the greatest determinant in visitor satisfaction. Visitors cited educational experiences and children’s programming as being of particular value to them.

Figure 16
Visitor Satisfaction —
“Overall, I am satisfied with
my visit.”



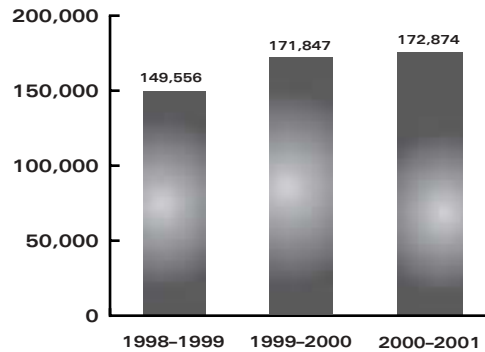
Canada Agriculture Museum

Over the past few years, the Museum’s emphasis on hands-on programming with animals, relevant to Canadian history, has helped to attract a strong visitor base. In 2000–2001, new animals were purchased to fill the new Horse and Cattle Barn. A new team of Clydesdale draft horses — Ted and King — replaced Mike, who was sold to a farm because of a hip injury. In addition, several new beef breeds are now on display, including Limousin, Angus, Hereford, Charolais, Shorthorn, Simmental and Blonde d’Aquitaine. Seasonally, the Museum also display Hays Converter, Highland and Belted Galloway cattle on loan from local breeders

A LaserGate admission system was installed this year to facilitate the admission process and capture visitor information — such as where visitors come from — through their postal codes. The Museum’s Web site was also completely updated, with a new look, easier navigation and additional content.

The development of a strategy for year-round operation was completed. Implementation of this strategy, which involves renovations to Building 94, would enable the Museum to increase the percentage of the collection which is on display from less than 1% to about 10%. It would also enable the Museum

Figure 17
Canada Agriculture Museum
Attendance



to provide visitors with year-round food service, and would enhance school visits with two classrooms where students could perform agricultural science experiments. Implementation of this plan would require additional resources not available at present.

In March 2000, the Museum put precautionary measures in place to protect its animals from the Foot and Mouth disease which is spreading across the United Kingdom, Europe and Argentina. The Museum worked closely with its veterinarian and the Canadian Food Inspection Agency to ensure that its measures were up-to-date and commensurate with the risk.

Exhibitions

A long-term exhibition plan guides the replacement of exhibitions. An interactive exhibition on tractors is currently being designed to replace the **Barn of the 1920s** exhibition in March 2002.

The Amazing Potato exhibition, which had been presented at the Museum since 1994, and previously at the Canada Science and Technology Museum, was donated to the Potato Museum in O’Leary, Prince Edward Island. The exhibition was launched at its new location in May 2000.

Long-term exhibitions are updated on a regular basis to maintain visitor interest, and to ensure that these exhibitions remain current both in content and method of presentation. No updates were scheduled for the Canada Agriculture Museum during this planning period.

Interpretive and School Programs

The Canada Agriculture Museum enjoyed a successful year of programming in 2000–2001. Several new programs were offered, together with many favourites from previous years. Programs were designed to appeal to all segments and age groups of our audience. Twelve special events were presented for the general public, beginning with the extremely successful Easter at the Farm program in April, and ending with Barnyard Break the following March. Most events met or surpassed attendance targets, with Sheep Shearing attracting 8,176 visitors — a 22% increase over the previous year’s event. The new Farming Off the Beaten Track event welcomed 2,880 visitors — more than double the attendance during the same weekend in 1999. The Museum’s popular Ice Cream Festival, attended by 4,283 visitors, once again enjoyed great interest among the public and the media alike, and will be repeated in future years. New this year was the Museum’s extended interpretation schedule, offering daily demonstrations from the beginning of March until the end of October. The popular bread-making demonstrations were presented daily from the beginning of May until the end of August, and on weekends in March, April, September and October. The Horse and Cattle Barn gave Museum staff an opportunity to develop new activities such as the “Equine Challenge”. In addition, two new touch-carts provided interpretive staff with interpretive material designed to show visitors some of the products and by-products associated with raising beef cattle and horses.

Birthday parties and three sets of preschool Barnyard Buddies workshops were offered throughout the year, as well as four day camps during the summer months. Over 2,000 children participated in birthday parties (a 50% increase over the previous year), and

more than 750 preschoolers discovered sheep, pumpkins, and agriculture in other countries in the spring, fall and winter Barnyard Buddies workshops. The eight weeks of Fun at the Farm day camps were booked solid; the pre-teen camp was close to capacity; and Junior Farmer Camp and Kinder Farm Camp were well attended. Over 450 children took part in our various camps.

The Museum offered two special events for schools, two seasonal school programs — Fall at the Farm and Spring at the Farm — and 11 regular school programs, four of which were geared to a high school audience.

Partners play an important role in the Museum’s programming, and the list of partners continues to grow. A successful one-day event organized jointly with Agriculture and Agri-Food Canada (AAFC), “FunFest on the Farm”, was attended by 7,168 visitors — an 83% increase over the previous year. The Museum worked closely with 4-H Canada to offer special activities to visitors during this day. In addition, the Museum participated in the AAFC display at ExpoQuebec in August, and the Royal Agricultural Winter Fair in November, by collaborating on a butter-making exhibition and presenting over 150 bilingual butter-making demonstrations. Rare Breeds Canada was a key player in many Museum events, including the Sheep Shearing Festival and Farming Off the Beaten Track. The Carp Farmers’ Market was a major participant in the Fall Harvest Celebration, and the Museum appreciated the input of the Central Experimental Farm’s Friends of the Farm for Canada Day. The local Agriculture Awareness Committee also maintained a close working relationship with the Museum, organizing a one-day “Slice of Farming” school day (attracting over 425 participants from local schools).

Attracting Visitors

Building awareness is a precursor to actual onsite visitation. During 2000–2001, media reports were instrumental in providing national coverage of the Museum’s activities. English audiences across the country learned about the Museum through reports on *Canada AM* (CTV) and Global Television and in *Harrowsmith* magazine, while French-speaking audiences received information from RDI (SRC), Canal Évasion and the print outlets *Enfants Québec*, *La Presse*, and *Le Journal de Montréal*.

Active media relations were key to keeping local residents aware of Museum events, exhibitions and issues. English audiences enjoyed coverage from The NewRO (CHRO-TV), CJOH-TV, CFRA-AM, *The Ottawa Citizen*, *The Ottawa Sun*, *Ottawa City Magazine*, *Ottawa Families*, *Capital Parent* and *Today’s Seniors*. French-speaking audiences received Museum reports from CBOFT (SRC) and *Weekend Outaouais*.

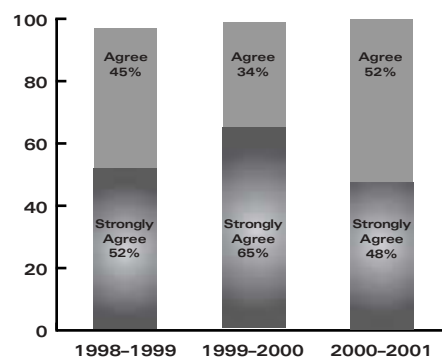
In addition to an active media relations program designed to raise awareness, a targeted advertising program contributed to reaching and exceeding attendance goals. Strategies used in the advertising program included the use of campaigns, versus promotion of isolated events, in order to concentrate media weight. The use of a brand-based approach to all communications resulted in a consistent format and the reinforcement of key messages. Establishing and adhering to guidelines resulted in media buys that carried sufficient reach and frequency to have a measurable impact. The media mix was also strategically chosen, and typically includes a combination of radio and print buys.

Another key element of promotion included review of the Museum's name, logo and slogan. The resulting name "Canada Agriculture Museum" captures the Canadian essence of the institution. The new slogan, "Where knowledge grows", plays on the Museum's agricultural offerings and learning opportunities. The logo was also redesigned to feature one of the Museum's icons, the dairy barn, which also houses the Museum itself. The logo depicts livestock and crops as well, as represented by a cow and a wheat sheaf respectively. The new name, slogan and logo are now actively used on all promotional materials. In addition, the use of advertising templates, brand colours, certain fonts and creative techniques has resulted in a distinguishable look and feel that is unique to the Canada Agriculture Museum.

Visitor Satisfaction

The level of visitor satisfaction at the Museum remained high. One hundred per cent of visitors surveyed indicated that they were satisfied with their visit and overall experience: 48% declared themselves "very satisfied"; the remainder, "satisfied". Visitors commented positively on the family orientation of their experience, as well as the opportunity for children to see and learn about live animals in a farm environment.

Figure 18
Visitor Satisfaction —
"Overall, I am satisfied with my visit."



Web Sites

Information technologies in general, and the World Wide Web in particular, have given museums unprecedented opportunities to reach greater audiences than could ever be welcomed to their physical sites. The Web also provides a new way for Museums to facilitate public access to their collections and research.

The Corporation's use of the Web is carried out in support of the following objective:

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

Achievement of this objective was accomplished on the Corporation's Web sites in several different ways. Firstly, the sites provide a platform for the promotion of the museums and the provision of basic service information. Secondly, work continued on increasing access to the collections and research of the Corporation. Thirdly, the unique properties of the Internet were explored with a view to developing a new generation of applications and products.

Promoting the Museums

The Corporation's Web sites provide immediate access to museum resources, and are a key means of disseminating knowledge to a broad audience. The Corporation's three sites have evolved since they were first launched in 1996 and, during the past year, the

sites were redesigned and updated to take advantage of new technological developments. The sites provide basic information about the Museums (how to get there, hours of operation, admission fees and facilities available), about programs available for schools and other visitors (with online reservation), and about forthcoming events. An important addition this year was an online version of *Portfolio*, the Corporation's mail-order catalogue. Although not fully implemented by the end of the fiscal year, the new catalogue has already begun to generate sales.

Access to the Corporation's Web sites are provided through a high-speed connection, which at the same time provides bandwidth for interactive on-floor exhibitions. The Corporation's three sites are visited by a combined average of 2,500 visitors per day.

Accessing the Collection

The sites also provide extensive information about the collection, including current print and electronic publications. A major addition, in the form of access to the library catalogue, was made this year, although staff shortages prevented full implementation.

The Corporation has made significant progress in the digitization of its assets, whether collection images or the contents of specialized archives. The Corporation has worked in partnership on several projects related to the Web sites, notably those related to the aviation collection and the Schoolnet Digital Collections program sponsored by Industry Canada. As a result of this and other efforts, 90% of the artifact collection had digitized images, and excellent progress was made in digitizing archival aviation material and the railway photograph collection. Some 8,500 images from the aviation archives are now mounted on the Canada Aviation Museum site, and visitors to all three sites can retrieve low-resolution images for non-commercial use, or order high-resolution scans and prints for a fee.



L. to R.: The Honourable David Collenette, Minister of Transportation; Mr. Paul Tellier, President and CEO of CN; the Right Honourable Adrienne Clarkson, Governor General of Canada, and Dr. Virender Handa, Chairman of the CSTMC Board of Trustees, at the ceremony marking the donation of the historical CN photo collection to the Canada Science and Technology Museum, on behalf of the people of Canada.

On May 10, 2000, the Canadian National Railway Company formally transferred its vast historical photographic collection to the Canadian public, to be housed at the CSTM. The collection chronicles 150 years of Canadian history and the stories of thousands of Canadians, and was accepted on behalf of the people of Canada by the Right Honourable Adrienne Clarkson, Governor General of Canada, from Paul Tellier, President and Chief Executive Officer of CN. This is one of the largest donations the Museum has ever received, containing more than one million images dating as far back as the 1850s. At the same time, the Museum

inaugurated the **CN Images of Canada** virtual photo gallery, an area on the Museum's Web site featuring 550 historic photographs, to which another 500 have since been added, with more to come over the next four years.

The Canada Aviation Museum renewed its partnership with Discovery Channel Canada to broaden its Web presence through "Flightdeck," a component Web site of the Exploration Network, located at www.exn.ca/flightdeck. This content-rich site uses the latest in multimedia technology, enabling visitors anywhere in the world to explore the Museum's collection from their homes. Original feature pieces have also been created by the Exploration Network's editorial staff, in conjunction with Museum curators.

Use of the Web sites as distribution outlets for research has also enabled the Corporation to reap the benefits of its investment in research, as it shares this information with a vast global audience. The experience of the Canada Aviation Museum, which has mounted a series of frequently downloaded illustrated essays on its site, demonstrates the power of this medium.

Exploring New Possibilities

During the year, the Corporation initiated a research project to explore the market for a new generation of electronic products. The underlying notion was that, while the individual sites for each of the constituent museums provide excellent access to their own subject matter, it may be possible to consider a more comprehensive treatment of broader scientific issues than the individual sites can accommodate on their own.

This project examined Web site trends and practices in similar heritage institutions, the demographics of users, the applications that might be of interest to users, menus of possible approaches, costs, and the potential number of users. The findings of the project will be assessed in 2001–2002, although a lack of internal resources continues to impede the Corporation's ability to take full advantage of these opportunities.

Publications

The accumulated knowledge resulting from research, collection and preservation activities must be shared with the world at large, 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, both in Canada and abroad. Publications remain 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.

Several approaches have been devised in order to meet corporate publication goals. Specialized material is published in a variety of formats, suited for use by other museums and other researchers. A selection of the most interesting historical assessment documents are published in the in-house Transformation Series. Special topic monographs written by staff, as well as other researchers, appear in the serial *Material History Review*. A more popular audience is reached in the electronically-published

Collection Profiles series, and through the *Curator's Choice* series, which provides additional curatorial insight to enhance all major exhibitions. In addition, occasional monographs are produced which may be directed at specialized audiences, from children to specialist hobby enthusiasts.

The Corporation recognizes the importance of the Web-based presentation of new monographs, and carefully monitors the demand for scholarly publications, in order to determine when and if electronic distribution may be more effective and less costly than print production.

During the past year, staff contributed four refereed articles to specialist and heritage journals, with additional research material awaiting acceptance. There was also an increase in the number of articles appearing in popular publications. One volume in the Transformation Series, "Histoire des outils manuels au Canada de 1820 à 1960," was produced. Two new titles in the electronic *Collection Profiles* series were completed for the CSTM Web site: "Weights & Measures" and "Threshing Machines". Two issues of the *Material History Review* were produced: Number 51, a general issue, and Number 52, a theme issue on Time, in association with Ryerson Polytechnic University. The cooperation of the Centre for Material Culture Studies at Newfoundland's Memorial University continues to enrich the journal. New titles in the *Curator's Choice* series were: "Canoes: The Shape of Success" and "The Locomotive Hall".

Curators at the Canada Aviation Museum added a new virtual essay — entitled "Shield and Sword" and dealing with the evolution of fighter aircraft in the 1950s — to the Canada Aviation Museum Web site, and updated an earlier essay on the three careers of Igor Sikorsky. Both initiatives drew upon research conducted for previously-completed exhibitions or publications. The total download of these two essays, plus that for the other essays on Rockcliffe — "The Airship R.100" and "Camouflage" — was about 8,500, clearly demonstrating the usefulness and importance of having information available in this form.

SUPPORT ACTIVITIES

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

Facilities

Facilities are an integral part of museum operations. They do more than accommodate 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 atmosphere, and becomes part of the public image — a symbol of the institution’s mandate. A large number of comments by visitors allude to their satisfaction or dissatisfaction with the quality of our facilities and related services. Providing services for museum visitors requires special efforts not associated with office space.

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

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

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

The provision and maintenance of appropriate facilities are, therefore, of critical importance. Currently, all of the Corporation’s buildings meet applicable health, safety and building codes.

Figure 19	Category	Health/Safety Codes	Building Codes
Corporation Facilities — Conformity to Applicable Codes	Public Spaces	100%	100%
	Office Spaces	100%	100%
	Storage Spaces	100%	100%

At the end of 1998–1999, the Corporation commissioned a Property Condition Assessment by independent professional engineers to, among other things, evaluate the facilities’ main components for their condition and remaining useful life as museum facilities. The report, received in June 1999, identified several deficiencies in the load-bearing capacity of roof beams and joists at the Canada Science and Technology Museum in relation to the *National Building Code*. These were corrected in the Fall of 1999. The engineers also identified the existence of a potential seismic hazard to the building, which required more detailed investigation during this past

year. One part of the facility, the Locomotive Pavilion, was examined in detail by consulting engineers, but the cost of reinforcements to bring this area up to current standards was prohibitive, given the age and quality of the building. In addition, the required structures would seriously limit use of the space by the Museum.

A major improvement to storage conditions for photographs and drawings was made with the construction of a new environmentally-controlled area at 2380 Lancaster Road. This area will be used to house the CN Photograph Collection.

At the Canada Agriculture Museum, the Corporation completed a Site Development Plan to be presented in early 2001–2002 to Agriculture and Agri-Food Canada, and the National Capital Commission Advisory Committee on Design. As Agriculture and Agri-Food Canada have still not completed their determination of the future of the Central Experimental Farm, no decisions could be made on further development, or the transfer of buildings occupied by the Museum to the Corporation.

The Corporation continued discussions with the federal government regarding a longstanding lack of appropriate aircraft storage space at the Canada Aviation Museum. Construction of a proper collection storage building continues to be a top priority, in order to safeguard these irreplaceable artifacts. A plan for the full development of the Rockcliffe site, prepared in 1992 and approved by the National Capital Commission, provides for the construction of a storage hangar on the east side of the existing museum building, for which a costed conceptual design has been developed. Discussions regarding the funding of this project have continued, and there are signs that this issue may be resolved in the next fiscal year.

Also at Rockcliffe, funding for a small office building — originally proposed in 1988 but postponed by a December 1989 decision to freeze construction in the National Capital Region — was approved by the Treasury Board in October 2000. Construction of the new building will begin in 2001, to be completed in March 2002. The Treasury Board also approved funding for the replacement of the roof membrane of the main building — a repair which became necessary several years earlier than expected.

The Corporation occupies a total of 61,300 square metres, at a cost of \$122 per square metre. Costs exceeded the target of \$105 per square metre, due primarily to increased amortization expenses resulting from capital improvements to facilities.

Revenue Generation

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

Revenue-generating activities can also help the Corporation to establish links with its supporters and with 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.

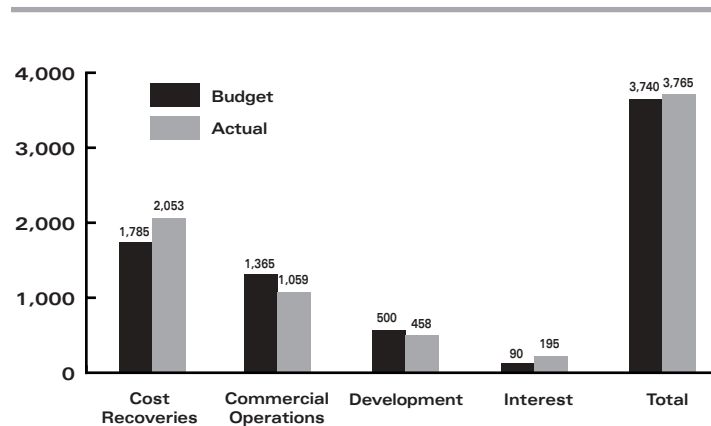
Revenue-generating activities are carried out in support of the following objective:

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

The Corporation continues to supplement its operating budget from admissions, the sale of its products and services, and sponsorships and donations. The Corporation also generates resources (services and money) through the active solicitation of volunteers and members. It will continue to charge appropriate admission fees in light of factors such as increasing costs, product improvement and market tolerance. Figure 20 identifies areas of revenue generation and performance achieved against established targets.

Total revenues for the year were \$3.765 million, slightly exceeding the revenue target of \$3.740 million. The total was 1.9% more than the previous year, thanks to continued strong demand for the Corporation's educational and group programs, unexpected interest revenue, and a new sponsorship agreement.

Figure 20
Revenue 2000–2001



In addition to educational and other group programs, operating revenues also include admission fees, revenues from the sale of farm products (mainly milk) at the Canada Agriculture Museum, and revenue from services provided to other organizations in connection with electronic access and travelling exhibitions.

Revenue from commercial operations was below target, as the Corporation was unable to rent a suitable off-site store over the Christmas season, and the development of sales through the Web site stores was delayed by a lack of resources. In addition, revenue from the Simex[®] simulator experience has continued to be affected by price reductions which were intended to increase school group participation.

Total revenues for Development, which include membership, sponsorship and fundraising, were \$460,000. This figure does not include the additional \$850,000 which was secured through sponsorship, and which will be realized by the Corporation over the next five years, in addition to an increase of \$165,000 directed to specific trust accounts as a result of fundraising efforts.

The membership program also continued to grow, exceeding its revenue target, while at the same time incurring fewer expenses than originally forecasted. This growth continues to be the result of increased membership promotion and effective renewal campaigns. In the category of paid visits by the general public, members continue to account for the majority of visits at the Canada Science and Technology Museum, and

a substantial percentage of attendance at the Canada Agriculture Museum and the Canada Aviation Museum.

In fundraising, the Corporation successfully completed its fourth annual appeal in support of the Canada Aviation Museum, and its first appeals in support of the Corporation's other two museum sites. In addition, a planned giving program was launched in support of all three museums and, as of year-end, over fifty individuals had formally requested information packages and direction on including museums in their estate planning. In sponsorship, the Corporation had its most successful year to date, securing revenues and contractual commitments in excess of \$900,000. In addition to cash-generated sponsorships, in-kind contributions totaling over \$22,000 were secured.

Administration

Administrative 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 cost and quality of service.

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

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

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

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

During the year, the Corporation negotiated and signed a new Collective Agreement with the Public Service Alliance of Canada, covering the period from April 1, 2000 to March 31, 2002. Progress was made on the development of a new classification system in cooperation with the Public Service Alliance of Canada, based in part on the Public Service Universal Classification System. This will be completed during the 2001–2002 fiscal year.

The Corporation commenced execution of a new three-year Information Technology Plan, with the development of specifications and acquisition of new Collection Management and Admission systems, and improvements to the security of information technology.

Parliamentary appropriations for 2000–2001 totalled \$22.6 million, representing an increase over the previous year of 13%. This increase in allocation will be directed to ongoing salary costs and property tax increases.

The Corporation endeavours to limit its administrative overhead, (including the core administrative functions of Finance, Human Resources, and Administrative Services; the Directorate and Board of Trustees; and those Facilities, Protection and Common Services costs which cannot be attributed to any operational activity) to 18% of total operating costs. This year, the target was exceeded by 2%, as a result of additional Corporate Development costs associated with the launch of appeal campaigns for the museums and unforeseen severance costs.

INTERNAL AUDIT AND EVALUATION

Internal Audit

The Canada Science and Technology Museum Corporation, in accordance with Section 131(1) of the *Financial Administration Act*, has an annual internal audit program which is carried out by contract auditors. This program is supplemented by an annual audit of the Corporation's financial statements by the Auditor General of Canada.

As part of its annual internal audit program, the Corporation completed an audit on copyright, which is intended to give the Corporation a better understanding of the impact of the amended *Copyright Act*, while helping to define potential risks in this area. To defray costs, the Corporation invited the other national museum corporations to participate. This invitation was accepted by the Canadian Museum of Civilization, with costs shared equally between the two institutions.

A contract was signed with the firm of Borden Ladner & Gervais to develop a set of guidelines which would assist the Corporation in matters involving copyright material, helping employees to recognize their responsibilities towards the artist, the public and the Corporation when dealing with copyrighted-related decisions. As a result, a Copyright Manual and standard forms were produced to address basic issues raised by Museum staff, and to present this information in an accessible format. This manual is meant as a guide for basic copyright information; it does not provide extensive or in-depth analysis of complicated situations, for which the Corporation will continue to seek legal advice.

Evaluation

As part of its evaluation research, the Corporation performs a variety of surveys and studies that assist in the development of exhibitions and programs. The Evaluation and Research Division carried out a variety of research and in-house consultations this year, aimed at establishing operational standards that can be used to manage public programming activities.

A key responsibility is the gathering of information on visitor satisfaction. Despite the rising costs of fieldwork, ten visitor surveys were carried out across the three museum sites. These covered different seasons, as well as special occasions such as Canada Day, Christmas, and March Break. A simplified report format was developed, giving managers a quick perspective on visitor trends. Ten such reports were speedily directed to key stakeholders via e-mail, and posted on the Corporate Intranet for wider reference. This increased effort has given the Corporation a more representative picture of annual visitor awareness, usage, and satisfaction, since sampling is now spread over all months of operation.

This detailed breakdown demonstrates that visitor characteristics and satisfaction vary between seasons. For example, the "top box" figure — or percentage of visitors who were "very satisfied" — for the Canada Aviation Museum is given below as 55% overall, but this figure was 64% on Canada Day, and 52% over the rest of the summer.

Figure 21
Visitor Satisfaction 2000–2001

	CSTM	CAvM	CagM
Very Dissatisfied	0.3	0.4	0.0
Dissatisfied	1.4	1.0	0.0
Neutral	7.0	2.7	0.0
Satisfied	47.7	40.5	51.8
Very Satisfied	43.6	55.4	48.2

Similarly, the Canada Science and Technology Museum's top box value ranged from 38% to 49%. Further breakdown by segment offers a clearer view of what visitors value. Direct observation of the museum experience was carried out via unannounced visits at the three sites. Improvements were evident in some service areas; others still require attention.

Some departments have integrated evaluation research into their operations, and have assumed greater responsibility in this area. The Evaluation and Research Division provided advice, resources, and contract management for these internal clients. The CSTM's active exhibition program was supported with a variety of front-end and formative evaluation studies, notably for current and developing exhibitions such as **Innovation in Canada**, **Canoes: The Shape of Success**, **Connexions**, **Forest Fire Management**, and **Love, Leisure and Laundry**. An interesting study of illicit visitor behaviour towards artifacts was also instigated by a working group on Artifact Protection. At the CAgM, both front-end and formative testing for the upcoming **Tractors** exhibition were carried out. Similarly, communications activities were supported with marketing studies such as a new slogan and logo for the CAgM. A local market survey of museum visitors and non-visitors was carried out, and analysis is ongoing. The Curatorial Division completed a mail-out survey of *Material History Review* subscribers, and began an in-depth telephone survey of institutional users.

Presentations on the Corporation's evaluation and marketing research were made at meetings of the American Evaluation Association, the Professional Marketing Research Society, and Intercom. The Director of Evaluation and Research also participated on Department of Canadian Heritage inter-departmental committees dealing with performance indicators and Web site evaluation.

Exhibition and Program Studies

The study of potential vandalism of artifacts on display revealed an interesting pattern: compared to the sometimes violent usage of exhibition interactives, artifact touching and operating — e.g., sitting in the McLaughlin-Buick — is extremely infrequent. However, the value of particularly significant artifacts may make even this low rate of occurrence unacceptable.

Formative work for the exhibition **Canoes: The Shape of Success** was extensive. In many ways, this project pushed the envelope of interactive development and formative evaluation. The Exhibition Evaluator was a member of the Exhibition Project Team, and multiple design iterations were allowed. As a result, the interactive elements in that exhibition have achieved record success levels. For example the “Design a Canoe” computer interactive doesn’t crash; its holding-power is 100% or better; and visitors learn the principles and variables affecting canoe design.

Front-end evaluation provides comprehensive, long-term benefits to an exhibition program, since it guides exhibit goals and directions, warns of possible problems, and identifies opportunities. The **Innovation in Canada** Exhibition Concept undertook a Canada-wide survey regarding awareness of Canada’s innovation heritage. The results showed that, while half of Canadians surveyed were aware of well-known Canadian inventions such as the Canadarm, the telephone, and insulin, an equal percentage of Canadians couldn’t recall a single significant Canadian invention. When asked what topics were most personally relevant to Canadians, the top three choices were medicine, natural resources, and energy. Subsequent focus groups of museum visitors revealed their concern that this exhibition might be less attractive for children, leading the Project Team to develop approaches designed to mitigate this risk. With this solid foundation, the Project Team has been able to develop and test eight interactive exhibit modules a year, in advance of their scheduled opening dates. This commitment to participatory development points to continued success in developing exhibitions that are enjoyable and relevant to visitors.

Communications and Promotion Studies

Marketing studies were carried out to help managers make the most effective use of resources. Admission fees were studied at the Canada Aviation Museum, and a review of price strategy was carried out for the Canada Agriculture Museum. Unannounced visits were used to assess compliance with corporate visitor standards.

The development of a new museum slogan and logo for the Canada Agriculture Museum and slogan and name for the Canada Science and Technology Museum included testing the various options with target audiences. Results of this research contributed to recommendations and final decisions regarding slogans, logos and museum names.

In addition, implementation of the new admissions system will enable several research questions to be asked of various seasonal audiences.

THE YEAR IN STATISTICS 2000-2001

The following is a statistical profile of some of the Corporation's activities during the year.

CANADA SCIENCE AND TECHNOLOGY MUSEUM CORPORATION

Collection Development and Management	2000-2001	1999-2000
Number of artifact collection records	32,913	32,153
Number of artifacts acquired	608	701
Percentage of artifacts acquired by donation	86%	84%
Number of Artifacts on loan	509	552
Reduction in cataloguing backlog	183	2,377
Number of library titles catalogued	3,476	2,507
Number of library titles acquired	4,596	1,527
Number of papers/lectures presented	21	24
Number of refereed publications produced	4	5
Number of other publications produced	17	14
Number of research enquiries handled (Libraries, Curatorial & Science Information)	4,085 (approx.)	7,960 (approx.)
Number of people viewing artifacts on loan	1,348,780	1,112,280



Canada Science and Technology Museum

Museum Access and Use	2000-2001	1999-2000
Number of school group visits	3,073	2,688
Number of participants in school group visits	117,306	102,355
Number of school program modules offered	28	27
Number of demonstrations, tours and workshops given	5,118	4,370
Number of people participating in demonstrations, tours and workshops	170,616	164,900
Number of special events held	21	27
Number of participants in special events	92,588	120,300
Number of travelling exhibitions on tour	2	1
Number of venues receiving travelling exhibitions	4	2
Number of visitors to travelling exhibitions (estimated)	1,409,580	142,000
Number of off-site demonstrations or events	9	7
Number of visitors to off-site demonstrations or events	2,500	1,805
Other use of facilities (number of participants)	6,665	4,472
Number of Web site visitors (new)	540,000	—



Canada Aviation Museum

Museum Access and Use	2000–2001	1999–2000
Number of school group visits	1,108	1,055
Number of participants in school group visits	36,000	34,200
Number of school program modules offered	15	16
Number of demonstrations, tours and workshops given	3,222	2,560
Number of people participating in demonstrations, tours and workshops	70,143	56,515
Number of travelling exhibitions on tour	0	1
Number of venues receiving travelling exhibitions	0	1
Number of visitors to travelling exhibitions	0	10,000
Number of off-site demonstrations or events	9	6
Number of visitors to off-site demonstrations or events	21,020	11,900
Other use of facilities (number of participants)	5,200	7,090
Number of Web site visitors	365,000	300,000



Canada Agriculture Museum

Museum Access and Use	2000–2001	1999–2000
Number of school group visits	500	450
Number of participants in school group visits	14,355	15,280
Number of school program modules offered	28	20
Number of demonstrations, tours and workshops given	2,756	2,080
Number of people participating in demonstrations, tours and workshops	90,545	87,985
Number of off-site demonstrations or events	3	3
Number of visitors to off-site demonstrations or events	175,000	150,000
Other use of facilities (number of participants)	2,225	3,500
Number of Web site visitors (new)	25,675	—

OUR SUPPORTERS

Members

The Corporation's membership program continued to grow, numbering 22,500 individuals in approximately 5,000 households. Member visits continue to account for a substantial percentage of the Corporation's paid local visits by the general public, and the program remains one of the largest in Canada.

Corporate Sponsors

The Corporation continues to work with its corporate sponsors in unique ways which address their business and marketing objectives.

The Corporation would like to thank the following companies for their generous sponsorship support.

Canada Science and Technology Museum

Presenting Sponsors:

Iogen Corporation — Energy Interpretation Hall
Natural Resources Canada, EnerGuide Program — **Love, Leisure and Laundry** exhibition
Energizer Canada — March Break
Energizer Canada — Holiday Programming
Canoe Inc. (Canoe.ca) — **Canoes: The Shape of Success** exhibition
DY 4 Systems Inc. — DY 4 Days

Major Sponsors:

Energizer Canada — Energy Interpretation Hall
Energizer Canada — Membership Program
Canada Mortgage and Housing Corporation — **Love, Leisure and Laundry** exhibition
Rogers@Home — **Log On** exhibition
3M Canada — Tiny Tots program

Canada Aviation Museum

Major Sponsors:

Honeywell — **Pushing the Envelope** exhibition
Bombardier Aerospace — **Pushing the Envelope** exhibition
Pratt & Whitney Canada — **Pushing The Envelope** exhibition
Energizer Canada — Membership Program
Pratt & Whitney Canada — The Next Generation Programs

Canada Agriculture Museum

Major Sponsor:

Energizer Canada — Membership Program

Contributing Sponsor:

Neilson Dairy — Demonstrations

Donors

The Corporation has successfully conducted annual campaigns on behalf of the Canada Science and Technology Museum, the Canada Agriculture Museum and the Canada Aviation Museum. Foundation grants, Major Gift and Planned Giving initiatives were also undertaken for each of the Museums during the year.

The Corporation would like to thank the following individuals, corporations, organizations and foundations for their financial support.

Corporations and Institutions

Air Research Technology Inc. (Canada Aviation Museum)
 Amicale Alouette Ottawa-Hull (Canada Aviation Museum)
 Biltmore Properties Inc. (Canada Aviation Museum)
 EADS Canada Inc. (Canada Aviation Museum)
 George Smyth Welding & Machine Shop Ltd.(Canada Agriculture Museum)
 Hope Aero Propeller & Components Inc. (Canada Aviation Museum)
 J.L.S. Enterprise LTD. (Canada Aviation Museum)
 Kenneth M. Molson Foundation (Canada Aviation Museum)
 M. Flynn Inc. (Canada Agriculture Museum)
 Mxi Technologies Ltd. (Canada Aviation Museum)
 NAV Canada (Canada Aviation Museum)
 Norfolk Mutual Insurance Company (Canada Agriculture Museum)
 Ornum Farms Ltd. (Canada Agriculture Museum)
 Pioneer Hi-Bred Limited (Canada Agriculture Museum)
 R.K.F. Aviation Ltee (Canada Aviation Museum)
 Ronsco Inc. (Canada Science and Technology Museum)
 Royal Canadian Air Force Association Trust (Canada Aviation Museum)
 Uplands Charitable Foundation (Canada Agriculture Museum)

Annual Individual Gifts*

The following individuals have made gifts of \$200 or more during the year.

Canada Science and Technology Museum

Mr. Howard Crichton	Mr. William MacDougall
Mr. Scott Darlington	Mr. Don J. Mason
Mr. B. Ross Giles, FCA	Mr. Donald McCartney
Mr. Marty Gillespie	Mr. Douglas Morton
Mr. David Goslin	Mr. David North
Mr. Trevor J. Hughes	Mr. Richard Parry
Mr. Philippe Hébert	Mr. Rick Rymek
Mr. Mike Krycek	Mr. P. Spearey
Mr. T. Lane	Mr. John St. James
Mr. Terence Ludlow	Mr. Clive Wickware
Mr. C. Lund	

Canada Aviation Museum

Mr. Ernst J. Anderson	Squadron Leader
Valorie M. Austin	R.E. Church, CD (Ret'd)
Mr. William Bain	Mr. John W. Clifford
Mr. John Barneson	Mr. Sterling Conrad
Mr. Earl H. Barr	Mr. P.R. Craig
Mr. Allan W. Becker	Mr. Thomas R. Craven
Mrs. Joyce Bell	Mr. Paul Dalseg
Mr. M.J. Bent	Lieutenant-General
Air Commodore L.J. Birchall	James I. Davies (Ret'd)
Mr. William Bissonnette	Mr. Bill Derbyshire
Mr. Terrence Blair	Mr. Wilfrid J. Dugas
Mrs. Aileen Bowyer	Air Marshall C.R. Dunlap
Mr. Peter J. Brennan	Mr. Roger Durocher
Mr. Adrian Brookes	Mr. Donovan Einarson
Mr. Mark Brooks	Mr. D. Everett
Mr. Paul J. Brunelle	Squadron Leader Robert J. Flynn
Mr. George Burroughs	Mr. Ed Foster
Wing Commander Ronald W. Butcher, DFC, CD	Mr. Andrew F. Fraser
General Bill Carr	R. John Garrioch, CD
Mr. George E. Chapman, Q.C.	Mr. Claude Gibson
	Mr. John Gillespie

**All proper names and titles used reflect the express wishes of donors regarding the publishing of their name.*

Mr. Robert K. Glendinning	Mr. William Murray
Mr. J.H. Grand	Mr. T.V. Ogilvie
Mr. Alex Guruprasad	Mr. W.M. Park
Mr. Merv Harron	Dr. Walter J. Pearson, DFC
Mr. James Hawe	Mr. Joseph Pope
Mr. Robert Hawley	M. Jean-Charles Potvin
Mr. Ray Healey	Mr. James B. Prendergast
Mr. Derek A. Heath	Mr. Bob Pytel
Mr. John B. Higham	Brigadier-General
Lieutenant-General	R. Murray Ramsbottom (Ret'd)
Robert D. Holden (Ret'd)	Mr. Leslie Rebanks
Mr. William O. Hough	Mr. L.H. Richard
Mr. G.D. Hunter	Mr. R.D. Richmond
Brigadier-General James D. Hunter	Mr. Barton Robinson
Mr. Reid T. Hutchinson	M. Michel Rossignol
Mr. G.F. Ireland	Mr. E. H. Salkeld
Mr. Doug Jackson	Mr. Clark Seaborn
Mr. Roy S. Jamieson	Mrs. Heather Sifton
Lieutenant-General	Mr. John H. Simpson
Harlo L. Jones, DFC, CD (Ret'd)	Mr. George R. Skinner
Mr. Fred J. Kee	Mr. Darrel G. Smith
Mr. James H. Kenney	Mr. Ken Smith
Mr. Jim Kowalyk	Mr. Edward Spencer
Mr. Norbert J. Logan	Mr. J.G. Stinson
R.C. (Bob) MacFarlane	Mr. George Swanson
Mr. Donald Mackenzie	Fred and Edna Terry
Mr. Marc Marsh	Mr. Eric Tipping
Mr. Bruce G. Matthews	Bill Waddell DFM (420 SDM)
Wing Commander	Mr. H.L. Walters
L. McArdle, DFC, RAF (Ret'd)	Mr. N.A. Webb
Mr. Ralph E. McBurney	Mr. D.S. Whyte
Mr. James D. McKnight	Mr. J.R. Wiseman
Mr. John E. McMeekin	Mr. Alec C. Woodley
W.R. "Bill" McRae	Mr. John Woodrow
Mr. Robert E. Merrick	
Mr. William J. Milner	
Mr. R.W. Moffatt	
Mr. W. Jack Molsley	
Mr. Angus C. Morrisson	
Mr. John T. Mullen	

Canada Agriculture Museum

Mr. Keith Christie
Dr. Russel Code
Mrs. Rosemary Davis
Dr. Harold C. Jackson
Mr. Harold MacDonald
Mr. David MacFarlane

Mr. William McCallum
Mr. Conrad Noble
Ms. Ann Thompson
Ms. Sharon Ann Wohlbold
Mr. Stanley Wonnacott

Individual Major Gifts*

The following individuals have given over \$1,000 in cumulative financial and in-kind gifts over the years:

Canada Aviation Museum

Mr. M. J. Bent
Air Commodore L.J. Birchall
Mrs. Aileen Bowyer
Mr. Peter J. Brennan
Mrs. Jean Bruce
Mr. Paul J. Brunelle
Ken and Fiona Cameron, in memory
of Howard Fowler
Air Marshall C.R. Dunlap
Mr. Rae Farrell
Mr. Ed Foster
R. John Garrioch, CD
Mr. Robert K. Glendinning
Mrs. Sally Gouin, in memory of Air
Commodore Wilfrid Peter Gouin
(1912–1993), M.B.E., CD, B.Eng.,
F.C.A.S.I.

Mr. Merv Harron
Mr. William O. Hough
Mr. Edwin Charles Hunt
Mr. Reid T. Hutchinson
Mr. James H. Kenney
W.C.E. (Bill) Loftus, made on his
behalf by Eurocopter Canada Limited
and the Eurocopter Canada Project
Office
Mr. Joseph Pope
Mr. John F. Riley
Mr. John H. Simpson
Fred and Edna Terry
Mr. W.B. Woolett

Planned Gifts (Legacy Society Charter Members)*

The following individuals have identified that they have remembered the Corporation with a gift in their estate plans.

Canada Aviation Museum

Mr. Anthony C. Baukham

Mrs. Jody Houlahan

Mr. J.R.G. Leach

Mr. Michael C. Marta

Mr. Claude Roy

Mr. John H. Simpson

Mr. Christopher J. Terry

Artifact Donors***CAGM Individual***

S. Herring

CAvM Corporate

Canadian War Museum

Christ Church
Beaurepaire

National Defence

CAGM Individual

A.S. Bain

M. Beauchamp

J. Bruce

E. Campbell

A.L. Carr-Harris

D. Comeau

J.A. Donovan

M.G. Ducharme

J.R. Ellis

B.M. Geary

J. Griffin

R.G. Halford

S. Harries

H.E. Hemming

G.M. Henderson

J.R.G. Leach

S. Liard

S.B. Luxford

R.M. Macpherson

R. Mandelker

D.H. Marshall

D.B. Mcgibbon

D.D. McLaren

J.I. Moffett

A.D. Mutch

W. Parker

H.A. Pretty

W. Rawstron

K. Reekie

P. Riordon

H.J. Russell

E. Sarton

J.M. Scott

H.J. Sykes

G. Thompson

K.T. Wallace

CSTM Corporate

Andrew Merrilees Ltd.	Meteorological Service of Canada
Bell Canada	National Research Council
Bell Canada Historical Collection	Parkwood Presbyterian Church
Canadian National Railway Company	Rogers AT&T Wireless
CBC Radio Canada	Rogers Cable
Enbridge Commercial Services Inc.	Rogers Communications
Law Society of Upper Canada	Royal Canadian Mint
Marconi Applied Technology	Rupert Neve Canada Inc.
McCord Museum of Canadian History	University of Ottawa
Measurement Canada	York University

CSTM Individual

F. Anderson	T. Fudemoto (estate)	G. Leduc
M. Barclay	B. Germundson	G. Leroux
N. Bellehumeur	R. Ghys	D. Macrae
D. Biehler	A. Greening	S. May (estate)
D. Biesenthal	J.P. Guevremont	D. Mckenzie
W. Campbell	D. Hazes	T. Middlebro
A.K. Collins	B. Hebert	L. Montabone
R.J. Corby	S. Herring	B. O'Malley
W. Corcoran	D. Hollands	O. Regier
J.H. Crysdale	D. Houlton	J. Ritchie
L. Dennis	M. Jericho	D.W. Skuce
K. Desson	J. Jones	G. Smith
R. Dykstra	E. King	E.R.T. Taada
L. Erwin	G. Korzenowski	
E.G. Finley	J. Lanigan	
S. Forbes	J. Laursen	

FINANCIAL STATEMENTS

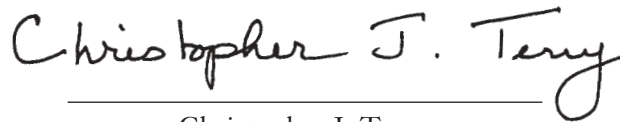
Management's Responsibility for Financial Statements

The financial statements contained in this annual report have been prepared by Management in accordance with generally accepted accounting principles in Canada, and the integrity and objectivity of the data in these financial statements are Management's responsibility. Management is also responsible for all other information in the annual report, and for ensuring that this information is consistent, where appropriate, with the information and data contained in the financial statements.

In support of its responsibility, Management has developed and maintains books of account, records, financial and management controls, information systems and management practices. These are designed to provide reasonable assurance as to the reliability of financial information, that assets are safeguarded and controlled, and that transactions are in accordance with the *Financial Administration Act* and regulations, as well as the *Museums Act* and the by-laws of the Corporation.

The Board of Trustees is responsible for ensuring that Management fulfils its responsibilities for financial reporting and internal control. The Board exercises its responsibilities through the Audit Committee, which includes a majority of members who are not officers of the Corporation. The Committee meets with Management and the independent external auditor to review the manner in which these groups are performing their responsibilities, and to discuss auditing, internal controls, and other relevant financial matters. The Audit Committee has reviewed the financial statements with the external auditor and has submitted its report to the Board of Trustees. The Board of Trustees has reviewed and approved the financial statements.

The Corporation's external auditor, the Auditor General of Canada, audits the financial statements and reports to the Minister responsible for the Corporation.



Christopher J. Terry
Director



Graham Parsons
Director General, Corporate Services

June 8, 2001



AUDITOR GENERAL OF CANADA

VÉRIFICATEUR GÉNÉRAL DU CANADA

AUDITOR'S REPORT

To the Minister of Canadian Heritage

I have audited the balance sheet of the National Museum of Science and Technology as at March 31, 2001 and the statements of operations, equity of Canada and cash flows for the year then ended. These financial statements are the responsibility of the Corporation's management. My responsibility is to express an opinion on these financial statements based on my audit.

I conducted my audit in accordance with Canadian generally accepted auditing standards. Those standards require that I plan and perform an audit to obtain reasonable assurance whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation.

In my opinion, these financial statements present fairly, in all material respects, the financial position of the Corporation as at March 31, 2001 and the results of its operations and its cash flows for the year then ended in accordance with Canadian generally accepted accounting principles. As required by the *Financial Administration Act*, I report that, in my opinion, these principles have been applied on a basis consistent with that of the preceding year.

Further, in my opinion, the transactions of the Corporation that have come to my notice during my audit of the financial statements have, in all significant respects, been in accordance with Part X of the *Financial Administration Act* and regulations, the *Museums Act* and the by-law of the Corporation.

A handwritten signature in cursive script, appearing to read 'R. Flageole'.

Richard Flageole, FCA
Assistant Auditor General
for the Auditor General of Canada

Ottawa, Canada
June 4, 2001

National Museum of Science and Technology

BALANCE SHEET

as at March 31

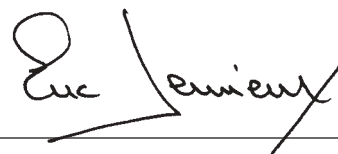
	2001	2000
	<i>(in thousands of dollars)</i>	
Assets		
Current		
Cash and short-term investments (Note 3)	\$ 1,678	\$ 2,331
Accounts receivable — government departments	3,490	452
— others	418	262
Inventories (Note 4)	403	362
Prepaid expenses	233	191
	<u>6,222</u>	<u>3,598</u>
Restricted cash and investments (Note 5)	241	231
Collection (Note 6)	1	1
Capital assets (Note 7)	8,885	8,883
	<u>\$ 15,349</u>	<u>\$ 12,713</u>
Liabilities and Equity of Canada		
Current		
Accounts payable and accrued liabilities		
— government departments	\$ 126	\$ 180
— others	1,630	1,604
Current portion of accrued employee severance benefits	153	32
Deferred revenues	276	43
	<u>2,185</u>	<u>1,859</u>
Accrued employee severance benefits	1,262	1,258
Deferred contributions (Note 8)	241	231
Deferred capital funding (Note 10)	10,138	8,883
	<u>13,826</u>	<u>12,231</u>
Equity of Canada	1,523	482
	<u>\$ 15,349</u>	<u>\$ 12,713</u>
Commitments (Note 11)		

The accompanying notes and schedule form an integral part of the financial statements.

Approved by the Board of Trustees



Chairman



Chairman, Audit Committee

National Museum of Science and Technology

**STATEMENT OF OPERATIONS
AND EQUITY OF CANADA**

for the year ended March 31

	2001	2000
	<i>(in thousands of dollars)</i>	
Revenue		
Admission and Programs		
Canada Science and Technology Museum	\$ 833	\$ 844
Canada Aviation Museum	496	432
Canada Agriculture Museum	284	207
Other	440	415
Commercial operations		
Boutiques	765	812
Food Services	33	37
Other	261	415
Corporate development	458	355
Interest	195	178
Total revenue	<u>3,765</u>	<u>3,695</u>
Expenses (Schedule)		
Management of the collection	6,249	6,049
Management of public facilities and programs:		
Canada Science and Technology Museum	6,562	6,675
Canada Aviation Museum	4,179	3,855
Canada Agriculture Museum	2,042	1,797
Support activities	5,041	4,222
Amortization of capital assets	1,245	1,259
Total expenses	<u>25,318</u>	<u>23,857</u>
Net result of operations before government funding	(21,553)	(20,162)
Parliamentary appropriation (Note 12)	22,594	20,036
Net income (loss)	<u>1,041</u>	<u>(126)</u>
Equity of Canada at the beginning of the year	482	608
Equity of Canada at the end of the year	<u>\$ 1,523</u>	<u>\$ 482</u>

The accompanying notes and schedule form an integral part of the financial statements.

National Museum of Science and Technology

STATEMENT OF CASH FLOWS

for the year ended March 31

	2001	2000
	<i>(in thousands of dollars)</i>	
Cash flows from operations		
Net income (loss)	\$1,041	(\$ 126)
Adjustments for non cash items		
Amortization of capital assets	1,245	1,259
Amortization of deferred capital funding	(1,245)	(1,259)
Contributions recognized as revenue	(155)	(55)
	886	(181)
Change in non-cash operating assets and liabilities	(2,950)	(909)
Change in accrued employee severance benefits	4	237
Total cash flows used in operations	(2,060)	(853)
Cash flows from investing activities		
Acquisition of capital assets	(1,247)	(2,193)
Increase in restricted cash and investments	(10)	(41)
Total cash flows used in investing activities	(1,257)	(2,234)
Cash flows from financing activities		
Funding for the acquisition of capital assets	2,499	2,193
Restricted contributions and related investments income	165	97
Total cash flows from financing activities	2,664	2,290
Decrease in cash	(653)	(797)
Cash and short-term investments, beginning of the year	2,331	3,128
Cash and short-term investments, end of the year	\$1,678	\$2,331

The accompanying notes and schedule form an integral part of the financial statements.

National Museum of Science and Technology

NOTES TO FINANCIAL STATEMENTS

MARCH 31, 2001

1. Authority, mandate and operations

The National Museum of Science and Technology was established by the *Museums Act* on July 1, 1990, and is a Crown corporation named in Part 1 of Schedule III to the *Financial Administration Act*.

The mandate of the 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 technical 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 Corporation manages three museum sites: the Canada Science and Technology Museum, the Canada Aviation Museum and the Canada Agriculture Museum. The 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 operations are divided into two complementary activities:

Management of the collection

This includes historical research, documentation, cataloguing, conservation, the library and related services.

Management of public facilities and programs

This includes the development and maintenance of exhibitions, interpretive and educational activities, communication and promotion, gift shops, food services and other services to visitors.

2. Accounting policies

These financial statements have been prepared in accordance with generally accepted accounting principles in Canada. The significant accounting policies are:

(a) Inventories

Inventories are valued at the lower of cost and net realizable value.

(b) Collection

The collection constitutes the major portion of the Corporation's assets but is shown at a nominal value of \$1,000 on the balance sheet because of the practical difficulties of reflecting it at a meaningful value. Items purchased for the collection are recorded as expenses in the year of acquisition. Items donated to the Corporation are not recorded in the books of account.

(c) Capital assets

Capital assets are recorded at cost, and are amortized using the straight-line method over their estimated useful lives as follows:

Building renovations	10 to 25 years
Equipment	5 to 12 years
Office furniture	5 to 10 years

(d) Pension plan

The employees of the Corporation participate in the Public Service Superannuation Plan administered by the Government of Canada. The Corporation matched these contributions equally for each employee for the year in which services are rendered until March 31, 2000. On April 1, 2000 the Corporation's share of contributions increased to \$2.14 for each dollar the employee contributes. The Corporation's share of contributions for the current year was \$978,706 (2000: \$434,175). These contributions are recognized during the year in which services are rendered, and represent the total pension obligations of the Corporation. The Corporation is not required under present legislation to make contributions with respect to actuarial deficiencies of the Public Service Superannuation Account.

(e) Employee severance benefits

Employees of the Corporation are entitled to specified benefits on termination in the form of severance pay, as provided for under labour contracts and conditions of employment. The cost of these benefits is recognized in the year in which they are earned by the employee. The current year's expense for these benefits is \$386,252 (2000: \$262,599) and total benefits paid during the year amounted to \$261,252 (2000: \$23,599). These benefits represent the only obligation of the Corporation that entails settlement by future payment.

(f) Donations

The Corporation follows the deferral method of accounting for donations.

Donations received for specific purposes, and related investment income, are deferred and recognized as revenue in the year in which the related expenses are incurred. Donations without restrictions are recognized as revenue when received or receivable if the amount to be received can be reasonably estimated and collection is reasonably assured.

Volunteers also contribute a significant number of hours per year. Because of the difficulty of determining their fair value, contributed services are not recognized in these financial statements.

(g) Parliamentary appropriation

The Government of Canada provides funding to the Corporation. Parliamentary appropriations received for specific projects are recorded as deferred revenue, and are recognized in the year in which the related expenditures are incurred. The portion of the parliamentary appropriation intended to be used to purchase depreciable capital assets is recorded as deferred capital funding, and is amortized on the same basis and over the same periods as the related capital assets. The remaining portion of the appropriation is recorded in the statement of operations in the year for which it was approved.

3. Cash and short-term investments

	2001	2000
	<i>(in thousands of dollars)</i>	
Cash	(\$ 329)	\$ 81
Short-term investments	<u>2,007</u>	<u>2,250</u>
	<u>\$ 1,678</u>	<u>\$ 2,331</u>

The Corporation's investments are limited to 60 days in Schedule "A" banks, government-backed paper and commercial paper rated A++ by the Canadian Bond Rating Services. The average rate of return in 2000–2001 was 5.24% compared to 4.95% in 1999–2000.

The market value of the short-term investments is approximately \$2,024,000. Accrued interest of \$14,562 is presented in accounts receivable.

4. Inventories

	2001	2000
	<i>(in thousands of dollars)</i>	
Books, pamphlets, replicas and other materials	\$ 403	\$ 349
Publications in process	—	13
	<u>\$ 403</u>	<u>\$ 362</u>

5. Restricted cash and investments

Restricted cash and investments arise from donations received from individuals and corporations for specific purposes, and are managed in accordance with the donor's wishes and the by-laws of the Corporation.

6. Collection

Part of the mandate of the Corporation is "to foster scientific and technological literacy throughout Canada by establishing, maintaining and developing a collection of scientific and technological objects . . ." This collection is the main asset of the Corporation and is composed of over 1.4 million items divided into the following areas:

Aviation:

aircraft and related materials

Communications:

graphic arts, film, photography and related systems, broadcasting, sound recording and reproduction, electronic communications and electronic music

Industrial technology:

generic industrial processes, engineering, industrial design, construction, domestic appliances, tools and systems

Natural resources:

energy production, processing and infrastructure, mining and extraction technology

Renewable resources:

agriculture, forestry and fishery technologies—harvesting and primary processing

Scientific instrumentation:

instruments, tools and systems with direct application to mathematics, chemistry, physics, as well as astronomy, astrophysics, medicine, meteorology, surveying and mapping, and information technology

Transportation:

motorized and non-motorized wheeled, track and trackless vehicles, motorized and non-motorized marine transportation, as well as the supporting infrastructure of technologies, tools and instruments

7. Capital assets

	2001		2000	
	Cost	Accumulated amortization	Net book value	Net book value
<i>(in thousands of dollars)</i>				
Building renovations	\$11,704	\$ 4,125	\$ 7,579	\$ 7,603
Office furniture	4,918	4,246	672	561
Equipment	5,136	4,502	634	719
	\$21,758	\$12,873	\$ 8,885	\$ 8,883

Capital assets do not include land and buildings occupied by the Corporation, since they are owned either by the Government of Canada or by private interests.

8. Deferred contributions

This represents the unspent amount of donations received for specific purposes and related investment income.

	2001	2000
	<i>(in thousands of dollars)</i>	
Balance at the beginning of the year	\$ 231	\$ 189
Gifts and bequests	152	84
Interest	13	13
Amount recognized as revenue in the year	(155)	(55)
Balance at the end of the year	\$ 241	\$ 231

9. Related party transactions

The Corporation is related to all Government of Canada departments, agencies and Crown corporations. The Corporation incurred expenses for the work and services provided by other government departments and agencies. These transactions were conducted in the normal course of operations, under the same terms and conditions that applied to outside parties.

10. Deferred capital funding

Deferred capital funding represents the unamortized portion of parliamentary appropriations used, or to be used, to purchase depreciable capital assets.

Changes in the deferred capital funding balance are as follows:

	2001	2000
	<i>(in thousands of dollars)</i>	
Balance at the beginning of the year	\$ 8,883	\$ 7,949
Appropriation received in the current year to purchase depreciable capital assets	1,247	2,193
Appropriation received in the current year to purchase depreciable capital assets in future years	1,253	—
Amortization	(1,245)	(1,259)
Balance at the end of the year	\$ 10,138	\$ 8,883

11. Commitments

As at March 31, 2001, the Corporation had entered into various agreements for accommodation, protection services, facilities management services and exhibition rentals for a total amount of \$12,942,000. The future minimum payments for the next five years are as follows:

(in thousands of dollars)

2001–2002	\$2,928
2002–2003	\$2,849
2003–2004	\$2,406
2004–2005	\$2,370
2005–2006	\$2,389

12. Parliamentary appropriation

	2001	2000
	<i>(in thousands of dollars)</i>	
Main Estimates amount provided for operating and capital expenditures	\$ 20,298	\$ 19,677
Supplementary estimates:		
Roof repairs	1,000	400
Aviation Museum accommodation	300	—
Payment in lieu of taxes	928	—
Severance adjustments and retroactive wages settlement	926	243
Outreach project	218	—
Scientific equipment	179	—
	23,849	20,320
Portion of amount deferred for capital projects	(1,253)	—
Deferred revenue used in current year to complete capital projects	—	650
Amounts used to purchase depreciable capital assets	(1,247)	(2,193)
Amortization of deferred capital funding	1,245	1,259
Parliamentary appropriation	\$ 22,594	\$ 20,036

13. Financial instruments

The carrying amounts of the Corporation's accounts receivable and payable approximate their fair values.

14. Comparative figures

Certain 2000 comparative figures have been reclassified to conform to the current year's presentation.

National Museum of Science and Technology
SCHEDULE OF EXPENSES

for the year ended March 31

	2001	2000
	<i>(in thousands of dollars)</i>	
Personnel costs	\$12,975	\$11,422
Leases of buildings	1,700	1,578
Professional and special services	1,466	1,535
Amortization of capital assets	1,245	1,259
Property taxes	1,213	1,500
Utilities	1,096	1,040
Advertising	760	410
Material and supplies	722	893
Property management services	625	627
Repairs and upkeep of buildings	584	601
Protection services	490	490
Gift stores, cafeteria and product marketing	465	501
Publications	387	347
Repairs and upkeep of equipment	365	417
Travel	240	228
Communications	214	204
Rentals of equipment	162	233
Office supplies and equipment	158	148
Freight express and cartage	153	105
Purchase of objects for the collection	92	63
Books	82	84
Design and display	74	123
Miscellaneous	50	49
Total expenses	\$25,318	\$23,857