

Business Case Curatorial Research Facility



1.0	Executive Summary	3
2.0	Background	7
3.0	Project Description	16
4.0	Strategic Alignment	29
5.0	Environmental Analysis	32
6.0	Alternatives	34
7.0	Business & Operational Impacts	36
8.0	Project Risk Assessment	39
9.0	Cost Benefit Analysis	41
10.0	Conclusion & Recommendations	47
11.0	Implementation Strategy	51
12.0	Review & Approval Process	53
Appendix A—	-Canadian Heritage Category A Status Requirements	54
Appendix B—	-Historical Synopsis of Building Partnership Discussions	56
Appendix C-	-Directory of Collections	57
Appendix D-	-The University of Alberta's Vision for the U of A Museums	59
Appendix E—	-The University of Alberta Museums and Collections Policy	60
Appendix F—	-Policy and Planning Committee/Academic Program Committee	66

Acknowledgements

University of Alberta

Janine Andrews, Executive Director

LSE/Museums and Collections Services

Frannie Blondheim, Associate Director

Museums and Collections Services

Léo Lejeune, Associate Director of Planning

Office of the University Architect, Planning and Infrastructure

Consultants

Steven D. Morton, Senior Vice President

HOK Advance Strategies

Martha G. Rayle, Vice President

HOK Advance Strategies

Robert Sannella, Senior Strategic Consultant

HOK Canada

Rolf Stuber, Principal

Stantec

Note: Final edits to the document created by HOK Canada/Advance Strategies were completed by Museums and Collections Services.

Executive Summary

Curatorial Research Facility

With an estimated 17 million objects and specimens, the University of Alberta has one of Canada's largest and oldest collections of museum objects. In selected disciplines and practices, these collections are among the very best in the world. Object-based research and teaching informs critical topics as varied as climate change, biodiversity of species, the creative process and multi-cultural issues, affecting all citizens. The University of Alberta is currently home to 35 research and teaching collections, in 15 departments and six faculties, that are located throughout the campus, housed in 15 different buildings and more than 110 rooms and facilities. Locations are scattered across both the main campus of the University, and as far away as the Devonian Botanic Gardens outside of Edmonton.

The University of Alberta envisions a new centralized, consolidated state-of-the-art "Curatorial Research Facility" (CRF) that will inspire the development of multi- and cross-disciplinary research and teaching.

The new CRF facility will:

- Promote the concept of interdisciplinary discovery-based learning;
- Embrace the concept of shared facilities and resources;
- Inspire the creation of new academic and community programs;
- Enhance recruitment and retention of faculty and students;
- Ensure optimal academic use of collections by students, faculty and researchers;
- Facilitate the development and application of new and emerging technologies;
- Ensure compliance obligations are met through asset protection;
- Engage and integrate the community through programs that provide local and distant access;
- · Advance research goals and activities;
- Enable partnerships;
- Position the University advantageously among its peers.

What is at Risk?

The University of Alberta Museums have occupied non-purpose-built facilities for the past 100 years. The collections have outgrown their facilities due to growth in academic research and teaching programs. A 2007 survey of all University of Alberta academic departments determined that close to 5,000 students enroll annually in 140 courses that require museum objects and specimens. An additional 90 courses that teach 1,000 students were reported to have the potential to incorporate museum objects into the curriculum (see page 8).

The quality of collection and research space has a major impact on the performance of the organization and the University's standing as an institution with world-class research collections and capabilities. While the collections are integral to research, teaching, and Canadian heritage stewardship, they are currently housed in space that is inadequate and inaccessible, with the exception of the Print Study Centre, which the Department of Canadian Heritage has cited as a model for the other University collections.

Space must be upgraded to comply with professional standards, legislation and regulations. The current facility situation offers significant physical and tactical limitations and puts millions of dollars of appreciating assets at risk.

The Key Issues Are:

- Object-based research and teaching programs exceed capacity.
- Distributed university museum management model is handicapped.

- The University is not compliant with policy, legislation and granting agencies.
- Application of new technologies is impeded.
- · Collections have outgrown facilities.
- Appreciating and irreplaceable assets are at risk.
- Community and donor confidence is eroded/strained.

What is the Solution?

A new consolidated Curatorial Research Facility, built to suit on the North Campus and uniting all 35 collections, is the preferred solution. Several factors act together to address the issues:

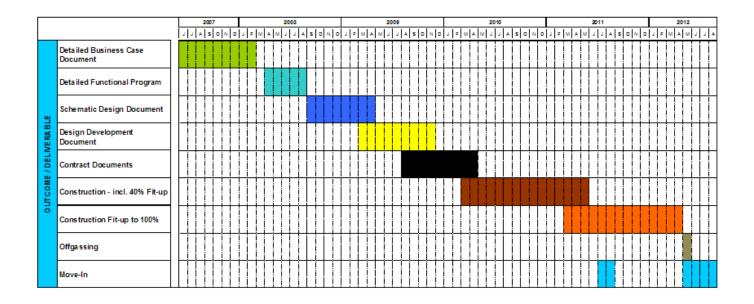
- Spaces, staff assignments, technology apportionment, and building systems are streamlined.
- Economies of scale for optimal space utilization are realized.
- Circulation and space utilization ratios are more efficient.
- Space requirements are tailored to meet the needs of the collections.

Space requirements for the new Curatorial Research Facility would be **32,431 square metres or approximately 350,000 square feet**. On the chart below, **Existing Area** reflects space currently dedicated to museum collections including collections storage, dedicated research labs (where they exist) and preparatory spaces (where they exist). **Existing Area** does not include associated classrooms and other common spaces. **As a further benefit**, space currently occupied by collections (110 rooms in 15 buildings totaling **9,000 square meters**) would be liberated, and could be **repurposed for other pressing academic needs** in each of the faculties and other teaching areas.

The space indicated in the **Proposed 2010** figures includes room for program growth (faculty, students, research and collections). **Proposed 2010** figures also include shared classroom spaces, preparatory facilities, dedicated research labs, digitization facilities for collections and common spaces. The difference between the two numbers (Existing Area and Proposed 2010) reflects the current situation where primarily non-purpose-built spaces such as closets, offices, classrooms and hallway cabinets, have been adapted for collections purposes. The **Proposed 2010** spaces would ensure appropriate and purpose-built facilities to facilitate access for all collections-related teaching, research and stewardship functions. The source of these figures is the University of Alberta Museums General Program Plan Phases I and II, using data collected in 2005/2006 with minor updates to 2008. The areas are allocated as follows:

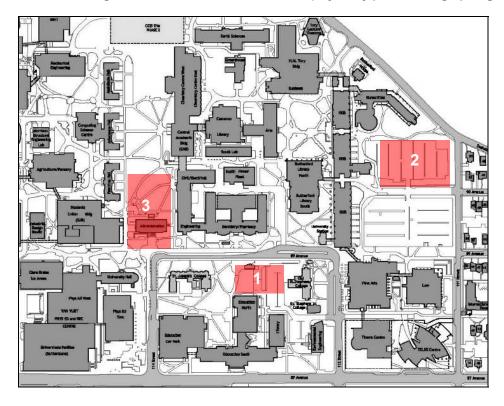
	Existing Area(m2)	Proposed 2010 (m2)
Faculty of Arts	1,209	4,921
Faculty of Medicine and Dentistry	50	273
Faculty of Agricultural, Life and Environmental Sciences	1,529	2,843
Faculty of Science	3,739	10,869
Central Collections/Services	2,371	10,320
Building Common	NA	3,205
Total Square Metres	8,898	32,431

Project design would begin in 2009, leading to ground breaking in 2010, with completion by April 2012. **The estimated construction cost for the new facility is \$243 million**. (Refer to Section 9)



The proposed location(s) on the North Campus are illustrated on the map below. South Campus was considered however it presents significant challenges and barriers. Faculty, staff, students and visiting researchers must collaborate with other disciplines, departments and faculties, as well as maintain close proximity to their home departments necessitating a North Campus location. (See page 17)

- 1. Education North East Parking Lot
- 2. HUB Mall Parking Lot
- 3. Underground Site at South End of Quad (key entry points rising up to ground level)



Does it fit with the University's Strategic Plan?

The Curatorial Research Facility is closely aligned with the strategies of the federal government, the provincial government, the University of Alberta and the City of Edmonton. The Curatorial Research Facility contributes to the fulfillment of goals, strategies and principles of the Business Plans 2008-2011 of the Departments of Advanced Education and Technology, and Culture and Community Spirit.

Were other alternatives considered?

In addition to the preferred alternative, the following alternatives were explored: 1) Do Nothing (status quo), 2) Distributed Model (renovate in current locations), and 3) A Building Partnership Model. Construction of a new consolidated building is the solution that best addresses program delivery, student enrollment, research capacity, training, technology transfer, environmental considerations, health and safety requirements, and meeting Category A designation.

Recommendations

A new consolidated Curatorial Research Facility will help the University of Alberta compare positively with its peer institutions. Without the new Curatorial Research Facility, the University will lose its Category A designation conferred by the Department of Canadian Heritage. The new facility can help the University of Alberta realize its goal to lead the world in integrated object-based research and discovery-based learning. Further, the University's vision of becoming "Top 20 by 2020" could be put at risk, as each of the comparable institutions has dedicated purpose-built curatorial /museums facilities.

It is recommended that the University pursue the strategy of consolidating all 35 academic museum collections in one facility, thereby optimizing use of resources and creating the most value for the University, University departments, the University's communities internationally, and for all Albertans. This consolidated Curatorial Research Facility must be located on the North Campus, where faculty, staff and students can maintain connections to their home academic departments.

The next step includes selecting the site for the facility, and further developing detailed programming and operational concepts for uniting the 35 collections, the faculty, and staff.

Background

Curatorial Research Facility

Issue / Opportunity

Issue:

Each of the University of Alberta's 35 collections is positioned within an academic unit which sets strategic direction, and integrates the collection, its associated programs and knowledge into academic plans. In addition to the duplication of spaces and services, in many cases the facilities for teaching, research and community engagement are inadequate and lack **appropriate physical and secure conditions for storage of museum objects. This jeopardizes the University's standing** as an institution with a reputation for world-class research collections and capabilities. The University's collections are in jeopardy. Millions of dollars of appreciating and irreplaceable assets are at risk.

The major concerns include:

Object-Based Research and Teaching Programs Exceed Capacity

Today, the University of Alberta Museums are integral resources for 140 University courses that teach up to 5,000 students per year in disciplines that range from anthropology, art and entomology to paleontology, pathology and zoology. The associated object-based research programs include unique international collaborative research projects that have been awarded numerous prestigious research grants. The University is moving towards an increasingly interdisciplinary environment that includes the diverse research and teaching programs associated with the University of Alberta Museums. However, these programs depend on a strong interaction and adjacency between efficient and accessible collections storage and the associated research and teaching labs. Without this effective proximity, the following problems result:

- Emerging and world-leading research and teaching areas are being developed, and essential new collections are being acquired without the appropriate facilities (e.g., meteorites, ethnomusicology, and Asian art).
- Several collections are stored in cramped rooms and closets or spill into hallways making them inaccessible for
 the types of research and teaching programs they have been collected to support (e.g., parasitology, paleobotany,
 ethnomusicology, and dentistry).
- Many collections are not near their research and teaching labs, limiting access to and jeopardizing collections through inappropriate transport of collections to and from these spaces (e.g., paleontology).
- Some collections are stored in environments that either limit student use or put students at risk if they attempt to access them (e.g., paleobotany, vertebrate paleontology).
- The central collections (Mactaggart Art Collection, University of Alberta Art Collection, Prince Takamado Japanese Collection, and Ethnographic Collection) were acquired for interdisciplinary research and teaching. However, these collections are spread among three buildings (Fine Arts Building, TELUS Centre, and Terrace Building) and are not adjacent to associated academic programs.

In 2007, a survey was conducted at the University of Alberta to determine the number of courses that use collections in teaching programs. Approximately 30 surveys were returned and the results are charted below. Of particular note was the number of courses currently being taught that could benefit from the integration of museums objects into the curriculum (e.g., use of the Mactaggart Art Collection in undergraduate and graduate history courses).

Faculty	Number of courses using museum objects	Enrolment	Number of courses teaching related subjects	Enrolment	Number of current courses with potential to use museum objects	Enrolment
Science	42	2698	2	57	16	724
Arts	62	1519	16	7	64	325
Law	n/a	n/a	n/a	n/a	9	n/a
ALES	9	251	2	153	n/a	n/a
Education	n/a	n/a	3	n/a	n/a	n/a
Extension	n/a	n/a	2	n/a	n/a	n/a

Distributed University Museum Management Model is Handicapped

The University of Alberta is a leader in operating a university model for campus-wide management of museums and research collections in a distributed environment. This model is effective due to the University's international-caliber researchers and its significant interdisciplinary collections. However, our potential for international leadership in collections-based research and teaching is impeded by lack of appropriate facilities, resulting in the following issues:

- Unnecessary repetition of collections management activities across similar collections (e.g., three major botanical collections in three different locations replicating protocols and equipment):
- Barriers to collaboration resulting from the distributed physical conditions;
- Inadequate compliance with policy and procedures owing to the distributed environment.

The University is not Compliant with Policy, Legislation and Granting Agencies

In 2004, the University of Alberta Museums' Category A Status under the Cultural Property Export Review Board was reviewed by the Department of Canadian Heritage. The University failed this review because of non-compliance with its own policies, inappropriate and insufficient space and inadequate environmental conditions for collections, and insufficient access to collections through academic and public programs. At the same time, the governing council for federal research funding agencies strengthened its compliance standards related to obtaining research grants involving museum collections (Tri Council Policy). These reviews have left us with the following issues:

- Retention of Canadian Heritage Cultural Property Export Review Board Category A status is threatened. We are
 tasked with upgrading our facilities to national environmental and security standards, developing a new policy and
 proving institutional compliance, and improving our public access channels. Category A status is explained further
 in Appendix A.
- The University of Alberta is required to satisfy a series of interim measures to demonstrate its commitment to short-and long-term compliance. These include short-term environmental compliance for selected collections, policy compliance and a curatorial facility.

Application of New Technologies is Impeded

The University of Alberta Museums' collections are slowly being digitized, positioning them to be involved in new technologies and networks that further research and teaching mandates. However, several issues have surfaced related to new technologies:

- Basic digitization of the collections, including capturing digital images, is impossible in a distributed environment when the equipment is located in one building and fragile and valuable collections are in different locations.
- Emerging technologies and investigative techniques have become essential to object-based research such as
 developing DNA data banks, application of high-resolution micro- and macro-CT scanning, and creation of 3D
 images. However, these techniques cannot be fully exploited without centralized facilities.

Collections Have Outgrown Facilities

Since 1910, the University of Alberta museums and collections have been stored primarily in non-purpose-built facilities across campus. Although the collections and associated research and teaching programs have grown substantially in the last 100 years, most of our museum facilities for curation, research and teaching have not. As well, the University has not kept pace with museum environmental and security standards, resulting in the following problems:

- Only three of the 35 collections are stored in spaces with environmental controls close to national/international standards for museum objects.
- Many collections spaces do not have sprinkler systems, increasing the potential for fire damage.
- Structural problems in many buildings jeopardize the protection and preservation of the collections.
- Collections have been improperly located next to or below 'wet' research labs or service pipes, resulting in water damage to several collections such as Vertebrate Paleontology and the Clothing and Textiles Collection. Unfortunately, these damaging events are routine. For example, over seven years the Clothing and Textiles Collection experienced four floods and still awaits an upgrade to water diversion systems to minimize damage from further flooding.
- Crowded campus conditions result in frequent relocation of artifacts to make way for renovations, relocations and
 other campus space needs. These moves are costly, time-consuming and routinely damage affected collections.
 Specific examples include the University of Alberta Art Collection (moved twice in last three years); Vertebrate
 Paleontology (moved to alleviate concerns about structural soundness of floors); Ukrainian Folklore Archives
 (moved twice in last two years); and Renewable Resources (next in line to make way for another function).
- Most collections have inadequate or non-existent security systems. Fire, theft and vandalism are continuing concerns.

Appreciating and Irreplaceable Assets are at Risk

The total asset value of the University of Alberta Museums is unknown. Ninety-five percent of the collections are not insured and have never been appraised. The insured value of the remaining 5% of the collections is currently \$50 million. However, these valuations are outdated and therefore, significantly understated. The University of Alberta Art Collection (UAAC) accounts for approximately \$45.5 million of the \$50 million insured value; Classics, Anthropology, Clothing and Textiles, and Ethnomusicology are insured for about \$4.5 million. All of the University of Alberta Museums collections are appreciating assets held in public trust by the University. Asset management issues include:

- The value of natural history collections (95% of the collections) to scientific research, teaching and learning, is inestimable, and loss of or damage to these collections would be calamitous. These collections represent almost 100 years of field-based research collecting by generations of professors, graduate students and staff at the University of Alberta, and many are considered international standards in their disciplines. However, the natural history collections are considered uninsurable as they are unique and irreplaceable. Therefore, it is difficult to determine a current dollar value.
- The collections and their management functions are distributed among many buildings and many departments
 and units making coordinated management of the collections difficult. Inventories of the collections in this
 distributed environment are difficult to conduct.
- Resources are lacking for obtaining appraisals when insurance coverage needs revisions or when significant objects are offered as donations.

Community and Donor Confidence is Eroded/ Strained

During the last three years, the University of Alberta has been offered, through donation and purchase, many major collections worth ~ 50 million dollars. However, having failed the review by the Department of Canadian Heritage, the University must limit receipt of significant cultural property until facilities are improved. As well, acquisitions of certified cultural property come with the obligation to provide access through educational programs and exhibitions (real and virtual) for the general public. These factors have raised the following issues:

 Donors see the University of Alberta Museums as a significant museum system worthy of significant donations, because the objects will be actively used for research and education, but we are limited in our physical capacity to accept these opportunities. Educators in the Alberta primary and secondary education systems rely on the new knowledge created through our object-based research to assist in the augmentation of their K-12 programs. Our physical environments have outgrown the capacity to offer programs such as the award-winning MUSE program and Science Sunday. Currently 60 teachers are waiting to access these programs.

Opportunity:

The University of Alberta envisions a new centralized, consolidated, state-of-the-art Curatorial Research Facility (CRF) that will inspire the development of multi- and cross-disciplinary research and teaching. The facility would:

- · Promote the concept of interdisciplinary discovery-based learning;
- Embrace the concept of shared facilities and resources;
- Inspire the creation of new academic and community programs;
- Enhance recruitment and retention of faculty and students;
- Ensure optimal academic use of collections by students, faculty and researchers;
- Facilitate the development and application of new and emerging technologies;
- Ensure compliance obligations are met through asset protection;
- Engage and integrate the community through programs that provide local and distant access;
- · Advance research goals and activities;
- Enable partnerships;
- Position the University advantageously among its peers.

The University of Alberta Museums have a recognized broad-spectrum collection of museum objects and specimens ranging from anthropology to zoology. In keeping with the **University's larger vision** to be amongst the top **20 in the world by 2020**, the CRF would address one of its most significant deficiencies relative to other top universities, while placing the University in a unique international leadership position because of its breadth and cross-disciplinary focus. The development of such a facility will further reinforce the University's commitment to its mission, "**Dare to Deliver**," by creating "a great research and teaching institution that offers leaders of tomorrow an opportunity to study at a level competitive with the world's finest universities."

Additionally, within the University of Alberta community of faculty, students, researchers, staff, volunteers, donors and the general public, the Curatorial Research Facility would ideally **operate** as a **technologically advanced model** that would **demonstrate operational, procedural and staffing synergies,** made possible through **collocation**. This consolidated facility would provide students, faculty and researchers with study, collaboration and meeting spaces, as well as **new** and **improved research laboratories and teaching spaces**. These facilities can encourage development of new services and knowledge, not easily demonstrated today. All of these tools create an environment that can facilitate development of **new academic programs** such as the following, currently under development.

Museum Arts and Sciences: A Proposal for New Programs of Study

The Curatorial Research Facility provides an opportunity to develop academic programs that will address new and emerging areas of object-based research and teaching that are not addressed by post-secondary institutions elsewhere in the world. The goal is to prepare the next generation of thinkers and problem solvers for the changing nature of work related to museum objects and collections occurring in a range of organizations including those involved in heritage, education, research, industry and business. A committee has been formed under the auspices of the Vice-Provost (Academic Programs) to oversee program development (See Appendix F). Consultations are in progress to complete the program proposal and have involved faculty, deans, chairs and students at the University of Alberta in addition to members of Alberta's heritage communities.

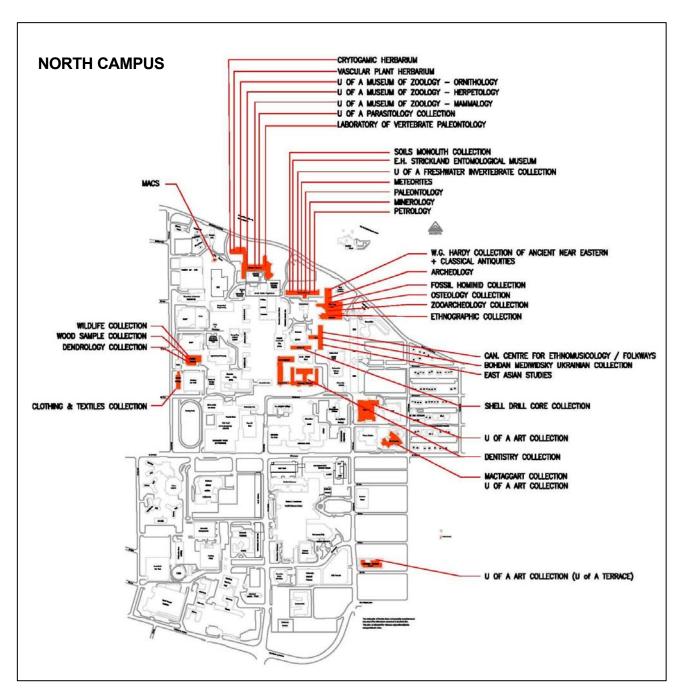
Central to the proposed program is a Masters Degree in "museum arts and sciences". Specializations in emerging areas will include: investigative techniques, forensic science and DNA repositories, cultural property and legal issues, repatriation and international law, object-based learning theory, presentation and communication of new knowledge in real and virtual environments, and creation of knowledge leading to a repository of meaningful resources on Alberta's natural and cultural history. The program is envisioned to advance knowledge in these emerging areas, and to connect to communities throughout Alberta.

Current Situation

Description:

It has become **increasingly difficult and costly** to function as a **prestigious cooperative** comprised of 35 unique and world-renowned collections that exist **in extremely fragmented and disparate locations**. The duplications of effort, equipment, and personnel are barriers to operational efficiency and further exacerbate risks and increase overall costs.

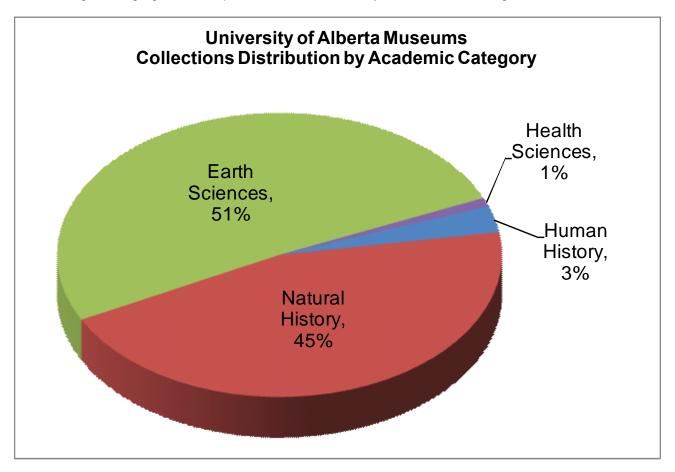
The detailed site plan on the next page illustrates the separate and disbursed entities as they currently exist. In addition, there is a chart listing the "home" department and area occupied.



NOTE: The diagram above is an UPDATED map of the collections, and it reflects recent and current moves of collections. This is an update to the map that appeared in the General Space Programme, as approved by FDC.



The following chart highlights the composition of the collections by broad academic categories.



The **University of Alberta Museums' failed** a **review of its Category A** status in **2004/05** as designated under the Canadian Cultural Property Act by the Movable Cultural Property Program (MCP) under Canadian Heritage as part of a national review of Category A designated institutions.

The U of A Museums are **currently in "ongoing review" status** and MCP noted "that if we (MCP) were to make a recommendation today with respect to the Category 'A' Status of the U of A Museums ... we would **likely** have to consider **recommending that this status be revoked**... They noted that we were non-compliant in the following areas:

- Outdated policy without compliance mechanisms

 Expectation renew policy. Status New Policy approved by Board on 28 March 2008.
- Non-compliance with policy across University

 Expectation Detail plans to bring about full compliance by faculty, staff and researchers with policy.

 Status Just beginning the process which requires all departments/individuals to follow the rules. The compliance/communication roll-out process will take approximately four years to complete.
- Insufficient space/inadequate environmental conditions/inadequate public access for all collections

Expectation – Short term: complete interim storage space for current cultural property in the TELUS Centre, provide them with updates, store all new Certified Cultural Property acquired by the University by donation/purchase/field collecting in the TELUS Centre.

Status – Canadian Conservation Institute reviewed the TELUS Centre space in fall 2007. Though they highly rated the storage facility, they noted that the environmental conditions were not yet at MCP standards. We are still working on this with F&O. We moved all Mactaggart Collection to new space and we are in process of moving certified collections from the Art collection to this space

Expectation – Long term: provide MCP with ongoing updates on the realization of the Curatorial Research Facility as a long-term solution to the broader environmental/storage/access problems.

Status – Sent MCP the Program plan for the U of A Museums and they are waiting for the approved Business plan.

- The U of A Museums Category A status is under review until we comply with their requirements. We understand that for now there is no firm timeline to comply. Loss of Category A status for the U of A Museums and the University would result in the following:
 - **Inability** for the University **to collect the best** of the best artifacts and specimens (e.g., Mactaggart Art Collection; Tagish Lake Meteorite; certain fossils; most art; textiles, etc.)
 - Current inability, until completion of the Category A review, to collect/preserve/exhibit items under
 Group VIII (musical instruments) which means that the Ethnomusicology collection and the University can
 not currently collect musical instruments as certified cultural property. We are currently allowed to collect
 under all categories except this one and MCP will not allow us to add this to our list until our review is
 completed/approved.
 - Inability to apply for movable cultural property grants to acquire certified cultural property.
 - Potential **loss of current certified cultural property** collections to other Category A Status institutions (e.g., Mactaggart).
 - **Inability to provide tax benefits** associated with certified cultural property results in loss of donors, donor confidence, donations and institutional support.
 - Loss of reputation.

Canadian Heritage stated that the University of Alberta's proposed development strategy demonstrates a "positive step toward addressing the many challenges currently facing the U of A Museums. Under the circumstances, we are prepared to continue our review of your Category A status with the understanding that you provide us with ongoing updates on the implementation of your strategy as it relates to the management of collections and the realization of an interim storage space at the TELUS Centre. In the longer term, we would expect that you would maintain ongoing consultation with us on the realization of the permanent Curatorial Research Centre facility to ensure that our requirements for designation will be met."

Project Description

Project Description

The 35 separate museum collections that comprise the University of Alberta Museums are currently housed in inadequate and disparate space throughout the campus. As plans for meeting the functional needs of collections are considered, the University is examining options for minimizing construction and operating costs, and, at the same time, improving the performance of the organization. These options have been assessed in two phases.

In 2005, the University of Alberta through Museums and Collections Services, initiated a high-level General Program Study, building on the Strategic Plan and vision sessions previously completed for the University of Alberta Museums. The University of Alberta Museums' Phase I General Program Report (2006) concentrated on the functional requirements of each individual collection housed separately. The 2010 decentralized needs of individual collections were found to be 58,829 net square metres or approximately 635,000 net square feet. These figures include room for program growth (faculty, students, research and collections) including preparatory facilities, dedicated research labs, digitization facilities and collections storage. While this plan resolved functional deficiencies, it did not optimize resource utilization, research and teaching capacity nor did it sufficiently improve upon status quo operations.

University administrators, recognizing the inherent difficulty of accommodating functional needs in incongruent space, requested a Phase II study to examine the requirements for a consolidated curatorial facility, a centralized facility that would accommodate all 35 collections. At the outset of this phase, University of Alberta Senior Administration brought forward the University's vision for museums which supported a consolidated facility and recognized that this facility must be on the North Campus (See Appendix D for further detail). The University of Alberta Museums' Phase II General Program Report focused on the connections and synergies between collections, optimizing functional requirements through shared, central services and joint-use space. The 2010 consolidated curatorial needs under this plan were found to be 32,431 net square metres or approximately 350,000 net square feet. The space indicated in these figures includes room for program growth (faculty, students, research and collections) together with shared classroom spaces, preparatory facilities, dedicated research labs, digitization facilities and common spaces. The total space requirements that were assessed in Phase II represented a 45% reduction from Phase I requirements and resulted in significant reductions in costs for the overall project.

Existing Area	Immediate		
(m2)	Need 2005 (m2)	Future Growth 2010 (m2)	Future Growth 2010 (m2)
1,209	3,464	5,085	4,921
50	116	272	273
1,529	2,859	4,594	2,843
3,739	15,114	22,397	10,869
1,243	10.056	26 491	3,886
1,128	10,030	20,401	6,434
0	0	0	3,205
8,898	31,609	58,829	32,431 348,958
	(m2) 1,209 50 1,529 3,739 1,243 1,128 0	(m2) Need 2005 (m2) 1,209 3,464 50 116 1,529 2,859 3,739 15,114 1,243 10,056 1,128 0 0 0 8,898 31,609	(m2) Need 2005 (m2) 2010 (m2) 1,209 3,464 5,085 50 116 272 1,529 2,859 4,594 3,739 15,114 22,397 1,243 10,056 26,481 1,128 0 0 8,898 31,609 58,829

Senior administrators and collections representatives alike endorsed the new vision for a consolidated curatorial facility where they could share space and resources. Almost all collections representatives embraced the concept of sharing, advising that the new occupancy scenario would:

- Enable discovery-based learning;
- · Advance research goals and activities;
- Enable partnerships;
- Promote cross-disciplinary interaction;
- Inspire the creation of new academic programs;
- Facilitate the development and application of new technologies; and
- Improve storage of and access to priceless University assets for the benefit of students, faculty, researchers and the general public.

Specifically, users saw an opportunity for;

- Implementation of collections management best practices;
- Availability of digitization capabilities and the application of new investigative technologies;
- Improved access to experimental laboratories and spaces for exhibitions and life-long learning programs, and corresponding research on formal and informal learning;
- Creation of new and improved spaces that would facilitate new academic programs;
- Extension of opportunities to the broader community in Alberta, in Canada, and internationally.

Faculty, staff, researchers and students continue to be enthused at the prospect of a new curatorial facility that could open new doors and create new opportunities.

1. General Characteristics

The facility will:

- Include the estimated 17 million objects and specimens from the University's 15 departmental collections/six faculties;
- b. Be planned to allow for future flexibility, adaptability and agility;
- c. Contain structural, mechanical (appropriate climate controls), electrical and security systems designed to protect and preserve the variety of artifacts, specimens and curatorial materials to be used and stored within (these systems should be capable of adjustment and offer customized conditions for special and fragile materials.
- d. Incorporate faculty and technical staff from six faculties and 15 departments; and
- e. Involve partners from the Alberta cultural and heritage communities and industry as they are identified.

2. Site Characteristics

a. Location:

A key consideration is the site and location selected for the consolidated facility. South Campus was considered however it presents significant challenges and barriers. Therefore a new consolidated curatorial facility must be located on the North Campus, as per Senior Administration's direction and the University's vision presented to University of Alberta Museums' stakeholders (see Appendix D) so that faculty, staff and students work in close proximity to their home academic departments, maintaining close relationships with these groups. Researchers and students must collaborate with other disciplines, departments and faculties, necessitating a North Campus location. For example, research on meteorites involves faculty in Engineering and the use of facilities in the National Institute for Nanotechnology.

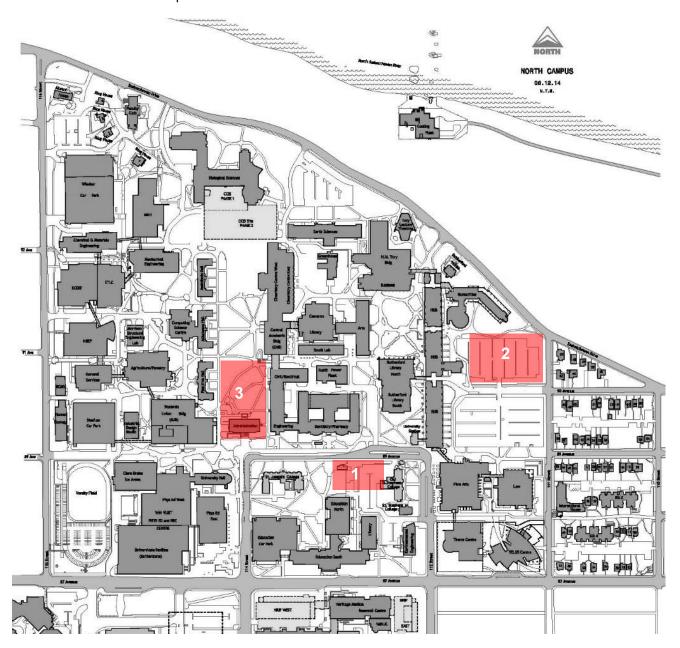
Because space on the North Campus is in very high demand, the University of Alberta Museums examined the degree of usage of each collection to determine whether any collections qualified as "low usage" for a possible location on the South Campus. In light of the University's Museums and Collections Policy (see Appendix E) and its focus on acquisition strategies that insure few low-use collections, only one collection of 35 could be considered low use currently. Further, the very purpose of the Curatorial Research Facility is to create open and easy access to all collections for students, faculty, and staff, resulting in full realization of a collection's potential uses. Therefore, it was agreed by the key stakeholders that a North Campus location was essential.

Possible North Campus Locations

Three possible locations for the new consolidated CRF are shown and described below. Each of these locations provides desirable proximity for the University of Alberta Museums to the home academic departments. Additional investigation and study will be required to determine which of these sites is the most suitable.

#1 on Map: Education North East Parking Lot

- On 89 avenue between 112 street and 114 street
- Good location close to University "Arts" district (fine arts, music, theatre)
- Acceptably close to other departments and faculties in sciences and humanities
- At public transit (bus/LRT) main stop
- Small footprint



#2 on Map: HUB Mall Parking Lot

- In the current parking lot east if HUB at 111th Street near Saskatchewan Drive.
- The building would offer views of the river valley to the north.
- The current 260-stall parking lot would be displaced. It may be necessary to replace lost parking spaces.
- This site offers the quickest and easiest CRF development.
 - i. No tenants require relocation.
 - ii. No complicated structures require demolition.
 - iii. Site preparation and construction do not require complicated logistics or special care for existing above or underground services.

#3 on Map: Underground Site at South End of Quad

- On the north side of the corner of 89th Avenue and 114th Street.
- The existing Administration building is slated for demolition.
- Site 3 would not be available until 2013
- Since most of the site consists of the University Quad, the new CRF building would be designed to be **mostly below grade** with portions of the building extending above grade.
- This could serve as the 'Entry/Gateway' to the Quad, creating an "iconic" presence that illustrates
 the history, knowledge, and leading-edge collections-based research of the University. This would
 need to be developed in a consistent manner with the schematic design of the Quad
 Redevelopment Project.
- However, of the three North Campus sites, this South Quad site is the most complicated logistically, requiring subterranean demolition and construction as well as replacement and relocation of existing utilities on this site which may be very complicated and time consuming.
- Site 3 locates the new CRF close to the Earth Sciences and Biological Sciences departments, which makes up the majority of the collections and their users.
- b. Phased future expansion should be considered and planned as part of this project.
- c. Proximate visitor parking should be provided.
- d. Convenient site access for trucks and deliveries is required. Campus traffic, queuing time and access to the CRF will be considered during planning.
- e. Loading dock facilities for multiple vehicles, able to accommodate vehicles up to 40-foot tractor-trailers vehicles as well as appropriate dockside materials handling systems (such as forklifts and a crane) are required.
- f. Loading dock receiving areas should be climate-controlled, with a stable environment to protect against contaminants, variance in temperature, biohazards, etc.
- g. Loading docks must be secured and covered to protect materials and vehicles from vandalism and theft.

3. <u>User-group/Functional Considerations</u>

- a. Collections should be easily accessible, to promote the study and review of objects, artifacts and materials.
- b. Research and teaching areas should be flexible and multi-purposed, and adjacent to centralized, shared registration and artifact preparation areas able to deal with different types of materials.
- c. Receiving areas require quarantine areas, biohazard area and cold/frozen storage areas. Adjacency to the loading dock is required.
- Staging areas are required for sorting and processing materials moved between campus collections, teaching facilities, vendors, donors, research sites, (etc.) and the CRF.
- e. Preparatory space should be provided for sorting, processing and storing acquisitions including pallet storage.
- f. Appropriate space for "on premises" research activities should be provided, including:
 - . Dedicated and/or shared short-term and long-term laboratory/research spaces for researchers.
- g. Multi-level security systems are needed to ensure controlled access into secure areas. Public access areas will have appropriate detection and observation systems to ensure security and protect against collection theft.
- h. Review and implementation of new materials storage and handling technologies will be considered along with appropriate high-density storage systems in the CRF.
- Selected object treatment and conservation areas will be shared with appropriate partners in Western Canada; Learning labs and exhibition spaces will allow teaching and illustration of new techniques in communications and presentation skills.

 Teaching and "eureka" spaces will be available for courses that use specimens/objects in teaching, for classes that would benefit from using objects for inspiration; and for enriching K-12 education through links to the Alberta curriculum.

4. Image and/or Branding

- a. The University of Alberta Museums Curatorial Research Facility will be unique and will enhance the University's reputation through:
 - Being a world-class, flagship facility;
 - Setting a unique standard in North America by embracing an open-access model for discovery-based learning:
 - Inspiring and enabling leading-edge object-based research activities;
 - Enhancing discovery-based learning programs;
 - Setting benchmarks for best practices in administering object-based collections for these purposes;
 - Encouraging and ensuring accessibility to all;
 - Including space and facilities that recognize and encourage University and University of Alberta Museums donors and volunteers; and
 - Providing space flexible enough to accommodate community engagement, innovative exhibition and educational programs.

5. Technology:

- a. Research and application of new technologies such as investigative techniques that advance object-based learning, research, access and teaching will be required in the new facility. Further, these curatorial technologies will require and be supported by leading-edge building technologies. State-of-the-art electrical, data and mechanical systems will be required to ensure operational and functional reliability and adaptability for the life of the CRF.
- b. State-of-the-art digitization centres will facilitate virtual access to museum objects for the purpose of local, national and international collaborative research, teaching and connections to the community.
- Furthermore, technology will play an important role in preservation of the collections by using the latest heating, ventilating and air conditioning (HVAC) systems to monitor and control temperature and humidity levels in the building.
- d. Secure and reliable interconnectivity with existing and proposed University technology and security infrastructure will be planned. To support users outside the building and the province, easy access and connectivity to digitally-accessible materials will be possible via high-speed fiber-optic and wireless networks.

Objectives

- Provide high-quality venues and services that improve integration of teaching, research and creative activities.
- Increase collaboration between and among University faculty and staff to facilitate cross-disciplinary learning and the creation of new academic programs and research opportunities.
- Attract international scholars as a key component of promoting the University as a world-class research and academic destination.
- Attract international students, and develop opportunities to extend teaching opportunities to the international community.
- Enhance the academic and community reputation of the University of Alberta Museums and museum collections, allowing the University to keep existing and potential funding streams open.
- Demonstrate leading-edge models to differentiate the University of Alberta among its competitors.
 - Provide "state-of-the-art" model for acquisition, storage, retrieval, preservation, research, digitization, access, reference and dissemination of curatorial assets.
- Recruit and train volunteers to support curatorial research facility initiatives and provide meaningful workexperience and training for students.
- Provide easy access for volunteers, donors, researchers and the general public for long-term relationship development.
- Provide easy access to students, faculty and staff.

- Protect and preserve key University collections and assets from damage and catastrophic loss.
- Integrate with University of Alberta's emergency preparedness and readiness planning.
- Resolve functional deficiencies and ensure that the University museum collections retain Canadian Heritage Category A status.
- Create digitization centres of excellence to facilitate object-based research and improve virtual access for all Albertans and communities internationally.
- Reduce long-term operating costs through:
 - Improved adjacencies;
 - Reduced costs associated with recruiting, retention and attrition;
 - Staff synergies;
 - Shared equipment resources; and
 - Eliminated duplication of support services.
- Improve and expand information technology and digital infrastructure.
- Improve visibility of the University and access to its resources fro communities in Edmonton, Alberta, Canada and the World.

Scope

1. Timeframe

The timeframe for the CRF move is driven both by the trigger of other University moves that will disrupt research, teaching and collection space. A key driver is demonstrating significant improvement justifying retention of Canadian Heritage Category A status.

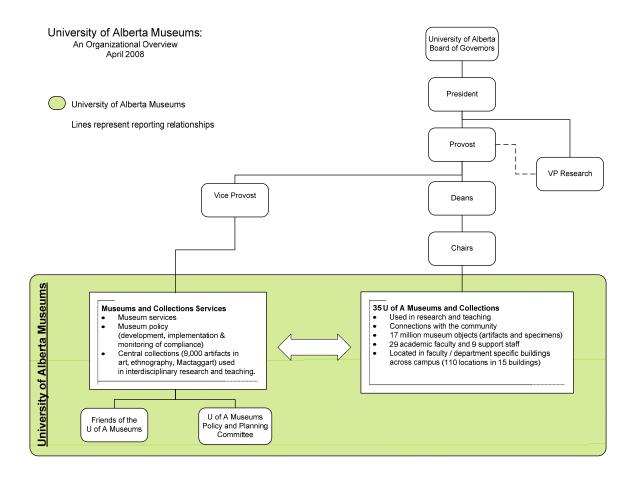
The Anticipated Schedule Chart in Section 11 – Implementation Strategy, outlines an implementation strategy that would complete the Curatorial Research Facility for occupancy by Summer 2012.

2. Personnel

- Faculty: curators are faculty members hired by academic units as professors with teaching and research responsibilities. In addition, they are appointed as curators to take on curatorial duties. Since 1999, 12 new academic faculty members with curatorial responsibilities have been appointed. The total number of academic curators is now 32. This is a 60% increase in academic curators in eight years. These types of appointments bring new collecting activities.
- Staff: Museums and Collections Services have a staff of nine dedicated museum professionals to service the needs of the 35 collections with an estimated 17 million objects. In addition, nine departmental collections have one staff member each in a collections management/assistant curator role; however, these staff members have other duties related to teaching and research in their departments.
- Students/Volunteers: volunteers cannot readily be accommodated by the University of Alberta Museums
 because their isn't any dedicated space for hosting, training, or placing volunteers, nor are there any resources
 for recruiting, training, or supervising volunteers. Volunteers should play an important role in the academic
 mission of the University by providing meaningful work experience for students, engaging community
 members (from alumni to donors), and maintaining connections with retired faculty and staff.
- Friends of the University of Alberta Museums is a separately incorporated not-for-profit society established to support the University of Alberta Museums and to be a bridge to the broader community.
- Institutes such as the newly formed Material Culture Institute are examples of innovative organizations of users.
- Partners from the Alberta cultural and heritage communities and industry are invited to participate in joint ventures as they are identified.

3. Department/Organization:

The University of Alberta Museums (See Appendix C: Directory of Collections) have been operating for years as a distributed network guided by the University of Alberta Museums Policy and Planning Committee (a committee of the Provost and reporting to the General Faculties Council), and supported by Museums and Collections Services (an Academic Support Unit), as illustrated below.



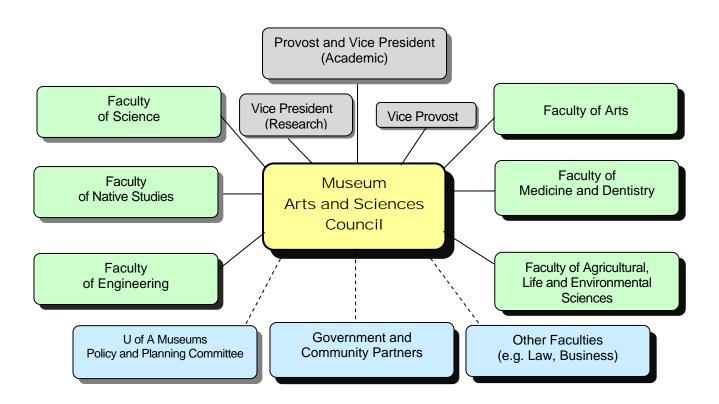
Museums Arts and Sciences Council

The proposed Museum Arts and Sciences Council (MASC), illustrated in the diagram below, would be a decision-making body that promotes, fosters and leads a wide array of interdisciplinary object-based research, education, and community service initiatives across the six University of Alberta arts and science faculties that house collections. MASC will be accountable to the Provost and Vice President (Academic).

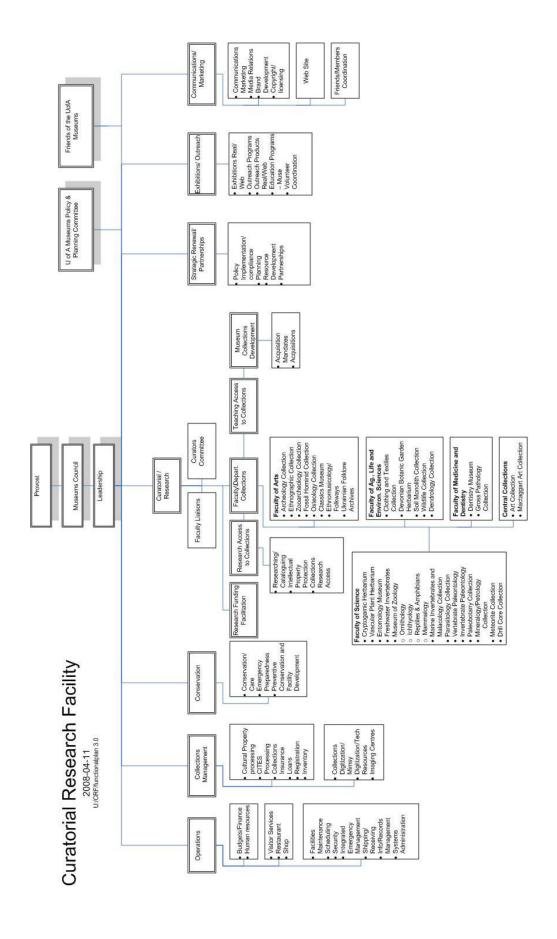
The intent of the MASC is to:

- Ensure that individual department and faculty needs continue to be represented in an interdisciplinary framework.
- Ensure interdisciplinary collaboration while preserving disciplinary connections.
- Ensure the development of interdisciplinary academic programs and research.

The membership of the proposed MASC could include the Deans of the six faculties with the majority of the research/teaching collections (Arts; Science; Agricultural, Life and Environmental Sciences; Medicine and Dentistry; Engineering and Native Studies), Deans with a direct interest in the academic programs, a representative from the Vice President (Research) office, the Executive Director of the Museums and Collections Services, the chair of the UofA Museums Policy and Planning Committee (See Appendix F), and others.



These relationships will be fully realized and operationally integrated in the Curatorial Research Facility. This is depicted in more detail on the functional organization chart on the next page.



Out of Scope

No out of scope items have been identified.

Anticipated Schedule

Several tasks that are important in the project evolution and project process have already taken place. They are as follows:

Completed Outcome/Deliverable	Completion Dates
Vision for U of A Museums	2003
Strategic Planning	February 2004
Facilities Requirements	April – August 2004
HOK Phase I Program	June – September 2005
Cultural Property Board Audit	2004 – 2005
Facilities Development Committee Approval for Phase I	February 2006
Phase II Program Planning	May 2006

The following tasks must take place before move-in for the new facility or facilities:

Outcome/Deliverable	Estimated Completion
Detailed Business Case Document	May 2008
Detailed Functional Program	August 2008
Schematic Design Documents	April 2009
Design Development Documents	November 2009
Contract Documents	April 2010
Construction – including 40% Fit-up (overall)	May 2011
Construction Fit-up to 100%	April 2012
Move-In	August 2012

Stakeholders

Primary Internal Stakeholders

Stakeholders	Overview of Business Requirements
Faculty	 Access to continuously expanding current and historical collections in multiple formats for teaching and research Access to research labs, museum expertise and students Retention of Category A status Compliance with museum standards to ensure funding via Tri-Council agencies, and others Access to home academic departments Centralized collections storage with open access Opportunities to coordinate with and learn from faculty and researchers from other departments 24/7 access to digitally accessible collections
Students	 Access to continuously expanding current and historical collections in multiple formats for research and learning Access to research labs and related facilities Retention of Category A status Compliance with museum standards to ensure funding via Tri-Council agencies and others Centralized collections storage with open access Opportunities to coordinate with and learn from students and researchers in other departments Access to internships, work experience, volunteer opportunities 24/7 access to digitally accessible collections
Dedicated museum staff	 Access to productive, efficient and environmentally supportive work environment with appropriate proximity to the right equipment, resources and people Opportunities to coordinate with and learn from other faculty, researchers, students and staff Retention of Category A status Compliance with museum standards to ensure funding via Tri-Council agencies, and others Centralized collections storage with open access Facilities intended for University staff training related to Museum's activities (e.g., management, curatorial functions, etc.) 24/7 access to digitally accessible collections
The University	 Capacity-building in academic programs Attraction, retention of faculty, staff, researchers, students Fiduciary responsibility for stewardship and management of assets University-wide Institutional memory of organizational development and shifting priorities Maintenance of existing and future funding streams Competitive-advantage among peer institutions Donor satisfaction, retention and growth Facilitate dissemination of University research and teaching strengths to diverse communities locally, provincially, nationally, and internationally

Primary External Stakeholders

Stakeholders	Overview of Business Requirements
Department of Canadian Heritage/Government of Canada	 Access for all Canadians Reviewing authority for the collections' spaces, policies and programs which resulted in a failing grade Category A status to collect, retain and transport cultural property is in jeopardy Influence over multiple funding streams for curatorial collections
Government of Canada	 Compliance with museum standard practices to facilitate grants and research funding from multiple agencies (Tri-Council, Canada Council, etc.) Satisfaction of fiduciary responsibility for stewardship and management of assets and legislative compliance
Government of Alberta	 Post-secondary education responsibility Access for all Albertans Compliance with museum standard practices to facilitate grants and research funding from multiple agencies Satisfaction of fiduciary responsibility for stewardship and management of assets and legislative compliance (e.g., crown property held by UofA) Government agencies utilize University of Alberta Museums and associated data for research

Secondary Internal Stakeholders

Stakeholders	Overview of Business Requirements
Non-collecting faculty	Opportunity to integrate new resources, discovery-based learning approaches into research and teaching
Non-collecting staff	Opportunity to learn, participate and take pride in University

Secondary External Stakeholders

Stakeholders	Overview of Business Requirements
The General Public	 Facilities for public use including collections and programs, demonstration/instruction areas for public school groups, community groups, local museums/galleries, visiting academics, etc. Facilities specifically designed for changing exhibits, special shows and visiting collections 24/7 access to digitally accessible collections Donor satisfaction related to stewardship of resources
Other Academic Institutions	Alberta's and Canada's university and college system use University of Alberta Museums for research and teaching at/for their institutions
National and International Research Community	 partnerships/cooperative opportunities with University of Alberta researchers 24/7 access to digitally accessible collections
Private Business and Industry (e.g., Environmental Consulting Companies, Archeological Resource Companies)	Rely on Museum collections and expertise for loans, research partners, consultations, identifications, research projects and contracts

Stakeholders	Overview of Business Requirements
Other public agencies and professional organizations (e.g., RCMP, Edmonton Police Services, Alberta Dental Association)	 Identifications services, consultations and collaborations Documenting and preserving professional history, exhibitions, public education, donors
Museum, Heritage and Cultural Communities (e.g., Friends of the Ukrainian Village; Ukrainian Pioneers Association of Alberta)	Documenting and preserving cultural history, identifications, research projects and partners, volunteers, program sponsors and donors

Section 4

Strategic Alignment

The University of Alberta's 2007-2011 University Plan states "Alberta's challenge ... is to discover the leading edge innovations that will transform Alberta's current resource advantages to sustainable new enterprises. Whatever they are, leadership in knowledge will be paramount ...". (p.1) The University of Alberta is at the core of this challenge.

The University of Alberta aspires to an international position of leadership with the ultimate goal to develop Alberta's human talent to be in the best in the world. The Curatorial Research Facility (CRF), with its focus on answering life's important questions, its 100 year history of establishing some of Canada's and the world's rare, unique and essential collections, leadership in diverse disciplines that focus on object-based collections, museological expertise, and innovative technology and building systems infrastructure, will be an essential component in reaching that goal.

Government of Alberta Alignment

"An innovative and prosperous province where Albertans enjoy a high quality of life built on vibrant communities and a healthy environment"

This vision guides the Government of Alberta's Strategic Business Plan 2008-2011, *The Right Plan for Today and Tomorrow* supported by ten goals and how each ministry will operationalize those goals. The Curatorial Research Facility (CRF) as envisioned, contributes to the fulfillment of goals, strategies and principles of the Departments of Advanced Education and Technology, and Culture and Community Spirit Business Plans 2008-2011 as follows:

Advanced Education and Technology

- Develop the capacity and capabilities within the province for outstanding research and innovation that can improve quality of life, foster new business opportunities, enhance economic growth in the province, and increase knowledge and skills in scientific fields in support of future discoveries.
- Alberta's advanced learning and research capacity aligns with learner and labour market demand and serves the needs of a knowledge-intensive society
- Align capital planning to respond to the enrolment and research capacity needs of the advanced learning and research system.
- Work with partners and stakeholders to develop a collaborative, networked, and multidisciplinary research system that spurs innovation.
- Albertans are able to participate fully in lifelong learning
- Alberta's research capacity supports enhanced excellence in research and innovation in strategic areas
- Promote science and technology awareness within Alberta, including encouraging youth to enter careers in science and technology.
- Develop, attract, and retain highly qualified scientific personnel at Alberta's research institutions and organizations.

Culture and Community Spirit

- Alberta is a culturally-vibrant province with a thriving arts sector that is valued by Albertans.
- Preserving, maintaining and displaying Alberta's art collections.
- Alberta's rich heritage is valued and the province's historical resources are preserved to enhance learning and research.
- Maintaining an international reputation for original scholarly research.
- Improve service to the public by enabling electronic access to, and preservation of, Alberta's historical resources.

2007 - 2011 University Plan, Dare to Discover, Dare to Deliver	Level of Impact	Explanation
"The University will need to deal with a variety of risks that have the potential to hinder the University's growth and realization of its vision and cornerstones."	High	Lack of compliance with meeting museums standard practices, including storage, staffing, policy and procedure, affects the ability to access research and other available grant funding for a diverse range of teaching, research and community engagement initiatives. The University's current level of academic achievement, staff attraction and donor contributions will be severely impacted if Canadian Heritage Category A status is lost. Substandard storage conditions and lack of compliance threaten the University's accreditation with respect to cultural property. Loss of accreditation would lead to the loss of some current collections, and essentially eliminate future donations. At present the collections are significantly understaffed, already impacting collection management practice/procedures and emergency plans.
"Incubating Scholarship" will mean special environments for innovative thinking	High	The Curatorial Research Facility will establish a venue for innovative thinking and collaboration in research; it also provides an additional incubation opportunity that does not and cannot exist within the present distributed model. By collocating the departments, the opportunity for enhanced synergy, best practice application and shared central services for student/faculty/research can be realized.
"Community Engagement" will mean cultivating lifelong relationships with outside communities	High	With a curatorial capacity on campus, new groups of donors and volunteers can be attracted to a closer, more desirable and collegial campus environment. Programs can be designed and offered for K-12 students to cultivate future researchers, learners and students K- 12 teachers desire access to trusted, leading-edge knowledge resources in terms of collections, associated research and the faculty and staff. The CRF can provide this access. With appropriate research facilities, digitization capabilities and expanded access (real and virtual), rural, aboriginal and non-traditional adult students will be able to access CRF resources, expanding the University's reach to new constituencies.
"A Transformative Organization"	High	A centralized facility will contribute to creating and

2007 - 2011 University Plan, Dare to Discover, Dare to Deliver	Level of Impact	Explanation
will facilitate positive change with a balance of centralized and decentralized resources		sustaining a "transformative organization," which will network leaders, incubate innovative initiatives, and enhance strong and flexible support staff /services.
Preservation, expansion and/or replacement of the University's Facilities and Infrastructure	High	Investment in a new Curatorial Research Facility preserves the assets of the collections.
A Transformative Organization Strategy: Build, enhance and maintain classrooms, laboratories, libraries and museums	High	This strategy is intended to produce facilities that provide a transformative university experience. The Curatorial Research Facility is an important component of this cornerstone.

University of Alberta Museums and Collections Services Alignment

2007 - 2011 Administrative Initiatives	Level of Impact	Explanation
Development and confirmation of a long- range acquisitions strategy in conjunction with the new academic plans.	High	The lack of available space with appropriate environmental storage conditions makes it difficult to actively solicit meaningful acquisitions. With additional space, substantive and important additions to the collections can be solicited and acquired. Acquisitions through field research are the leading method of acquisitions in many disciplines. The lack of preparatory, research, investigative and storage space hinders this process, hindering the research and teaching initiatives.

University of Alberta Learning Services Alignment

2007 - 2011 Learning Services Goal	Level of Impact	Explanation
Provide high quality venues for service delivery, protection, preservation of collections and operational effectiveness.	High	As stated in Section 2, the current Curatorial facilities do not adequately protect and preserve the collections. Sufficient venues, (let alone high quality venues) for protection, preservation and operational effectiveness do not exist.

Section 5

Environmental Analysis

Current Trends and Pressures

With the magnitude and importance of the current object-based resource collection, and with an emphasis on curatorial research and true integration into the academic life of the university, the University of Alberta will be a leader and an innovator in developing the type of facility proposed. As such, there are no existing models that approximate what is envisioned, and it becomes almost impossible to benchmark.

There is considerable academic interest in the proposed facility, specifically in object-based learning via museum items in the broadest terms. Because the University of Alberta's vision is to be among the top 20 universities in 2020, the "Dare to Discover" vision states that it will be a transformative organization. The new Curatorial Research Facility and the associated programs would directly contribute to realizing that vision.

The proposed facility could be considered a hybrid with its multiple missions as a teaching and research facility, as well as a museum facility. Benchmarking the best practices of curatorial facilities is very challenging at this time.

Given that this facility would premiere this approach and represent the first of its kind, the guidelines we can attribute should:

- Encompass a direct connection with the core values and mission of the institution;
- · Be reliable indicators and support long-term organizational and fiscal responsibility; and
- · Be easily verified and reported.

University Benchmarks

Benchmarks, best practices and metrics for university museums don't exist in the literature and there are no apparent formal rankings that have been developed. A report from the University Museums UK Group (2004) for example, provides recommendations regarding university museums that focus on the social, educational, and community benefits of better support for museums from University governing bodies. However, that study focused only on those museums that have a public access component, and did not address those that had a research and teaching function.

Museums and Collections Services is positioned to conduct a study as a next phase of development and would focus on measures that relate to Canadian Cultural Property Act Category A compliance (policy implementation, environmental standards and access) as well as those that relate to institutional mission and mandate such as research grants and funding, undergraduate and graduate course delivery, international research projects, and international ranking of programs.

Identifying Comparables:

The University of Alberta Office of the President has identified selected universities in North America that are publicly-funded organizations of comparable size and breadth of academic programming as benchmarks for the University of Alberta. A formal, in-depth and comprehensive benchmarking study has not yet been conducted on these universities in terms of their museum collections. However, for the purpose of this business case, we reviewed publicly available information on each university to determine some factors related to their museums and associated programs.

The universities reviewed are:

University of British Columbia McGill University University of Toronto University of Arizona University of California Berkeley University of California Los Angeles University of Illinois University of Michigan University of Minnesota University of Wisconsin University of Washington

Preliminary Observations:

- The University of Alberta is the only institution that does not have at least one dedicated museum facility. Each comparable university has at least one purpose-built museum facility, with additional research collections and exhibit halls distributed throughout their campuses.
- Each university, including the University of Alberta, has a similar type and range of disciplines represented in their collections including natural history, humanities, technology and art collections.
- A few of the universities offer graduate degrees related to museums studies, which are either generalist programs
 or embedded in other disciplines such as anthropology. Others offer undergraduate practicum or single museumrelated courses. None appears to have a program similar to that envisioned by the University of Alberta.
- All of these universities integrate museums and collections into teaching and research programs to varying degrees, offering access to students and researchers in the same manner as the University of Alberta.
- Each university museum offers access to the general public (adult and K-12 communities) through exhibitions and public and educational programs, such as social events, lectures, demonstrations, family and children's events, volunteer programs, guided tours, workshops, and gallery walks. The University of Alberta programs in these areas, but is limited in what can be offered.

Section 6

Alternatives

With an estimated 17 million objects and specimens in 35 research and teaching collections that are located throughout the campus in more than 110 rooms in 15 different buildings, the challenge has been to narrow the range of viable options. The collected studies and findings have resulted in the following alternatives:

Alternative One: "Do Nothing" (Status Quo)

Alternative Two: Distributed Model (Renovate in Current Locations)

Alternative Three: The Building Partnership Model

Alternative Four: Consolidated Model

Alternatives Comparison

Options	Considerations/Findings/Conclusions
	Ţ
1) Do Nothing	 Key Considerations: Existing distributed space disperses collections, students and staff. Close proximity to home academic departments. Dispersed collections continue to be at risk for lack of appropriate space and environmental climate conditions, theft, damage and lack of closely supervised care. Likely loss of Category A status, loss of funding streams from national agencies, collections, donations and academic community stature (e.g., Mactaggart Art Collection and a matching government of Alberta grant of \$40 million for the China Institute; Highest space requirement and highest operating costs. Collections continue to be moved/relocated to accommodate University's building plans Findings: No construction investment. Lose collections to other institutions or damage and theft. Existing policies and protocols may remain. Operations function as now. Highest operational costs for space, staff and resources. Low visibility/branding/identity (and possibly negative identity) for University of Alberta Museums within the University, the local community and internationally. Loss of donor confidence in University's ability to steward collections. Dispersed and distributed collections and staff make it difficult to address business
	 continuity for the University's emergency preparedness strategy. Operational inefficiencies occur because model is under-resourced.
	Conclusion: Not a viable option. Diminishes University's stature as a world-class academic institution.
2) Distributed Model	Key Considerations:
	 Existing distributed space disperses collections, students and staff. Close proximity to home academic departments.
	Dispersed collections may continue to be at risk for theft, damage and lack of closely supervised care.
	635,000 square feet required from existing space inventory.
	Highest space requirement and highest operating costs.
	Construction costs of renovation may be higher than a "build-to-suit" scenario. Findings:

Options	Considerations/Findings/Conclusions
	Provides environmentally appropriate facilities.
	Probably enables retention of Category A status.
	Existing policies and protocols will remain. Facility solution does not require an
	operational change.
	Highest operational costs for space, staff and capital resources.
	Low visibility/branding/identity for University of Alberta Museums within the University,
	the local community and internationally.
	Dispersed and distributed collections and staff make it difficult to address business
	continuity for the University's emergency preparedness strategy.
	Conclusion: Not a viable option. Uses the most space at the highest cost to retain the
	operational status quo.
3) Building	Key Considerations: (Note: this model considered partnerships to share space.
Partnership	Partnering on programs was considered elsewhere).
Model	Relationships have been investigated with the Art Gallery of Alberta, the Royal Alberta
	Museum and other organizations (See Appendix B)
	Collections would continue to be dispersed.
	Collections would not be located close to home academic departments, limiting easy
	access for students, faculty, and staff.
	Provides environmentally appropriate facilities.
	Probably enables retention of Category A status.
	Findings:
	Dispersed collections may continue to be at risk for theft, damage and lack of closely
	supervised care.
	Differing missions and mandate hinder synergies and operational effectiveness. Differing missions and mandate hinder synergies and operational effectiveness.
	Difficult logistics and long term implementation delay U of A Museums CRF appellidation
	consolidation.
	 Low visibility/branding/identity for University of Alberta Museums within the University, the local community and internationally.
	Conclusion: Not a viable option. Differing mandates, difficult negotiations and logistics
	make this option difficult to implement.
4) Consolidated	Key Considerations:
Model	Consolidates collections and staff into one location.
	Close proximity to home academic departments.
	Provides space relief for high-demand North Campus disbursed spaces.
	350,000 square feet required in a new "build-to-suit" facility.
	Lowest space requirement and lowest operating costs.
	New construction costs may be lower than significant renovation costs
	Findings:
	Promotes/facilitates achievement in academic mission.
	Creates innovative "best-in-class" new space and technologies for University-based
	museum collections.
	Supports world-class scholarship.
	May serve as the catalyst for development of new degree programs, such as
	"museum arts and sciences."
	Serves as a catalyst for new interdisciplinary research.
	Preserves the collections.
	Optimizes staff, resources and collections management.
	Requires operational changes with new policies and protocols.
	Ensures retention of Category A status.
	Stand-alone facility creates high visibility/branding/identity for the University of Alberta
	Museums within the University, the local community and internationally.
	Addresses business continuity for the University's emergency preparedness strategy.
	Conclusion: Best option. Uses the least space, for the least construction cost, and
	provides the best opportunity to build a "transformative organization."

Section 7

Business & Operational Impacts

Impacts of Alternatives

In this section, the business and operational impacts of the alternatives identified in Chapter 6 are described. These alternatives include:

- Do Nothing (Maintain the status quo)
- Distributed Model (Renovate in current locations)
- Partnering Option
- Consolidated New Facility

Primary Internal Stakeholders

Stakeholder Impact	Type of Impact	Alternative 1 Do Nothing	Alternative 2 Distributed Renovated	Alternative 3 Partnering	Alternative 4 New Consolidated Facility
Faculty/Museum Staff		Impact Level	Impact Level	Impact Level	Impact Level
Strengthen reputation as world-class leaders in object-based research and teaching	Positive	Low	Low	Low	High
Attract and retain high caliber international faculty	Positive	Low	Low	Low	High
Improve faculty effectiveness through access to collections and research facilities	Positive	Low	Low	Low	High
4. Demonstrate leadership and best in class for curatorial research.	Positive	Low	Low	Low	High
5. Reduce loss or risk of damage to research materials	Positive	Low	Low	Low	High
6. Provide high quality workplaces that enhance the effectiveness of University staff.	Positive	Low	Low	Low	High

	Stakeholder Impact	Type of Impact	Alternative 1 Do Nothing	Alternative 2 Distributed Renovated	Alternative 3 Partnering	Alternative 4 New Consolidated Facility
St	udents		Impact Level	Impact Level	Impact Level	Impact Level
1.	Students will have access to an increasing body of exceptional faculty, particularly in key interdisciplinary areas	Positive	Low	Low	Low	High
2.	Students will have access to interdisciplinary learning opportunities and the technology to support object based learning	Positive	Low	Low	Low	High
3.	Improve access to research collections and increase space for lab and instructional uses.	Positive	Low	Low	Low	High

	Stakeholder Impact	Type of Impact	Alternative 1 Do Nothing	Alternative 2 Distributed Renovated	Alternative 3 Partnering	Alternative 4 New Consolidated Facility
St	udents		Impact Level	Impact Level	Impact Level	Impact Level
4.	Provide high quality venues and services that improve integration of teaching and research activities into a positive university experience	Positive	Low	Low	Low	High
5.	Improve learning experience through access to enhanced and improved curatorial services.	Positive	Low	Low	Low	High

	Stakeholder Impact	Type of Impact	Alternative 1 Do Nothing	Alternative 2 Distributed Renovated	Alternative 3 Partnering	Alternative 4 New Consolidated Facility
Th	e University		Impact Level	Impact Level	Impact Level	Impact Level
1.	Retain Category A designation	Positive	Low	Low	Low	High
2.	The addition of a state of the art, modern facility will enhance the reputation of the University.	Positive	Low	Low	Low	High
3.	The University will not need to keep relocating collections to provide space for other important initiatives.	Positive	Low	Low	Low	High
4.	Mitigate risk of damaging priceless artifacts when relocating and renovating.	Positive	Low	Low	Low	High
5.	Provide a modern facility that will be efficient, sustainable and have a low(er) operating costs.	Positive	Low	Low	Low	High
6.	Increase "Community Engagement" and cultivate lifelong relationships with outside communities.	Positive	Low	Low	Med	High

Primary External Stakeholders

	Stakeholder Impact	Type of Impact	Alternative 1 Do Nothing	Alternative 2 Distributed Renovated	Alternative 3 Partnering	Alternative 4 New Consolidated Facility
Go	overnment of Canada / Alberta		Impact Level	Impact Level	Impact Level	Impact Level
1.	Grow areas of research and teaching excellence that are of direct relevance and importance to the Alberta and Canadian economy.	Positive	Low	Low	Low	High
2.	Increase Alberta Government access to high quality international scholars and researchers.	Positive	Low	Low	Low	High
3.	Attract increased public and private sector funding sources for University programs.	Positive	Low	Low	Low	High
4.	Improve Alberta business environment with well-educated workforce.	Positive	Low	Low	Low	High
5.	Expand relationships between the University and outside agencies	Positive	Low	Low	Med	High
6.	Increase required capital funding for University CRF.	Negative	Low	Low	Low	High

Secondary External Stakeholders

	Stakeholder Impact	Type of Impact	Alternative 1 Status Quo	Alternative 2 Renovate	Alternative 3 Partnering	Alternative 4 New Facility
Th	e General Public		Impact Level	Impact Level	Impact Level	Impact Level
1.	Increase "Community Engagement" and enhance the positive perception of the University as a beneficial community resource.	Positive	Low	Low	Med	High
2.	Distinguish Edmonton and Alberta as the home of a world-class research destination and institution.	Positive	Low	Low	Low	High
3.	Expand access and services to the general public.	Positive	Low	Low	Low	High
4.	Improve proximity to research collections.	Positive	Low	Low	Low	High
5.	Expand quantity of research materials.	Positive	Low	Low	Low	High

The impact assessment above further supports the selection of the preferred alternative – A Consolidated New Facility.

Section 8

Project Risk Assessment

Risk of Project (Not including Status Quo)

With any large project such as this, there is a risk that it will not achieve the anticipated benefits, or cost more than planned. The following chart identifies strategies to mitigate and manage risks:

Risk Assessment for Most Viable Option	Probability	Impact	
1. Labor shortages and inflation may increase construction costs	Medium	Medium	
Mitigation Strategy: Build within a set timeline. Mitigation Strategy: Apply rigorous project and construction management methodologies. Mitigation Strategy: Fit up the least amount of space required to house the existing museum collections.	 Capital costs control Schedule control Delay fitting up areas for future expansion until outside funding is secured 		
2. Funding is not accessed in a timely manner	Medium	High	
Mitigation Strategy: Complete and submit final business case to initiate Government of Alberta funding approval.			
3. Design/construction costs exceed budget.	Medium	Medium	
Mitigation Strategy: Utilize fixed price contracts for development where possible.			
Mitigation Strategy: Build some of the expansion as a shelled space and fit out as demand warrants.			
4. CFI and other federal research funding direction will change and funding levels will not be sustained or will decrease.	Medium	High	
Mitigation Strategy: Diversify funding sources. Mitigation Strategy: Keep decision-makers informed.		ment of benefits nent to continue	
5. Design/ construction team is not procured in a timely manner.	Low	High	
Mitigation Strategy: In anticipation of funding approval prepare an RFP, for retaining architects and a construction manager as soon as possible.			
6. Unforeseen hazardous and regulated materials are discovered during backfill, which leads to added costs and scheduling delays.	Low	Low	
Mitigation Strategy: Conduct environmental site assessment as soon as possible.			

Risk of Not Proceeding with Project (Status Quo)

The following list identifies possible risks of not proceeding or delaying the project:

Project Risk Assessment	Probability	Impact
Lack of capacity will jeopardize faculty/student ability to collect for research purposes; can't advance research	High	High
Mitigation Strategy: Cancel or limit academic programs that require research collections.		
Mitigation Strategy: Refuse donor gifts-in- kind and risk losing donor support and monetary gifts.		
Mitigation Strategy: Stop acquisitions via field collecting and research.		
2. Crowded and unsuitable (antiquated) space reduces quality of instruction and level of student satisfaction.	Medium	High
Mitigation Strategy: Extend teaching hours to limit the number of students per class.		
Mitigation Strategy: Invest in renovation of existing spaces and establish quotas for student enrolment.		
Mitigation Strategy: Limited or cancel use of objects / specimens in teaching and discovery-based learning		
3. Limited ability to attract and retain top academic staff	High	High
Mitigation Strategy: Provide other benefits and amenities.		
Modern research and increasing demands will not be supported by the current and cramped facilities.	High	High
Mitigation Strategy: Renovate and make best use of current space.		
5. Leveraging external sources of research funding, including federal CFI grants, will be jeopardized.	High	High
Mitigation Strategy: Diversify funding sources.		
Mitigation Strategy: Keep decision-makers informed.		
6. Jeopardize University Category A status.	High	High
Mitigation Strategy: Selectively renovate current distributed spaces.		
Mitigation strategy – Selectively deaccession collections.		
7. Loss and/or damage to valuable University of Alberta assets.	High	High
Mitigation Strategy: Selectively renovate current distributed spaces.		
Mitigation strategy – Selectively deaccession collections.		

Section 9

Cost/Benefit Analysis

A new consolidated Curatorial Research Facility will help the University of Alberta positively compare with peer institutions. This new facility can help the University of Alberta Museums realize its goal to lead the world in integrated object-based research and discovery-based learning. Without the new Curatorial Research Facility, the University will lose its Category A status. Further, the University's vision of becoming "Top 20 by 2020" could be put at risk, as comparable institutions all have dedicated, purpose-built curatorial/museums facilities.

The benefits of a new consolidated Curatorial Research Facility are:

The University of Alberta Museums stature in research and discovery-based learning will be enhanced.

- One of the world's best University collections will have the world's best object-based research and teaching facility.
- Edmonton, Alberta, and Canada will be distinguished as the home of a world class object-based research and discovery-based learning destination and institution.
- One of the largest University based museum collections will be protected and preserved, enhancing and expanding the value of the tangible knowledge assets of the University.
- Greater collaboration with other universities, the Alberta government and other international research institutions will be enhanced.

2. Increase the visibility, community access and support of the University of Alberta Museums

- The University could exhibit the dynamic collections that are now held in storage making them inaccessible to faculty, students, researchers, alumni, donors, school children and the general public. Examples include: art by Jack Bush, Illingworth Kerr, Group of Seven and Emily Carr in the University Art Collection; rare paleontological specimens in the Laboratory for Vertebrate Paleontology; Tagish Lake and Bruderheim meteorites from the Meteorite collection.
- Faculty could better incorporate the study of museum objects into their teaching and research.
- Alumni interest could be sparked by exhibitions and public events, encouraging donations.
- Engage K-12 education system with hands-on learning.
- Broader community access results from enhanced digitization facilities and programs.

3. Recruitment and retention of faculty and staff

- Recruitment of highly qualified, world-class caliber researchers, curators, and educators will be enhanced.
- World-class faculty, staff, students and facilities attract more research grants and donor funding.
- New facilities will support teaching/research staff growth.
- Educational multidisciplinary and inter-disciplinary synergies across the 35 collections will be incubated and supported by the consolidated facility.

4. Recruitment and retention of students

- World class faculty and researchers attract world class provincial, national and international students.
- Recruitment of highly qualified researchers, curators, and educators will be enhanced with a world class student population.
- Discovery-based learning opportunities for students across six faculties enhanced.

5. Improved flexibility and adaptability

- New facilities can be designed with an "open-ended" view to accommodate future, new and/or changed programs, equipment and technology.
- Highly efficient, modular, state-of-the-art storage areas, tools, and technology will accommodate all the different collection types.

6. Improved operations and reduced operating costs

A new building will have modern systems that will be energy efficient and result in lower operating costs.

- A new facility will contain state-of-the-art monitoring for all building infrastructure systems.
- The University will no longer need to relocate collections to make room for other University space requirements. This will alleviate the risk of damaging collections during the relocations.

The table below indicates specific benefits impact for specific groups of stakeholders.

Indicates a benefit.

	Quantitative and Qualitative Benefits					efits
Stakeholders Impacted	1	2	3	4	5	6
Faculty						
Students						
Museum Staff						
The University						
Dept of Canadian Heritage						
Government of Canada						
Government of Alberta						
Non-Collecting Faculty and Students						
Other Academic Institutions						
The General Public						

Lost Funding Opportunities

The lack of a building devoted to object-based teaching and research at the University of Alberta, adequately resourced with people, technology and expertise, has resulted in the loss of museum/heritage/gallery funding, programs and partnerships. Additionally, the University of Alberta Museums are unable to build on successes and achievements; to be responsive to opportunities as they present themselves; and to lead initiatives that emanate from the collections, knowledge and expertise inherent to a research-intensive, post-secondary institution. These are lost opportunities to benefit Albertans, the University and its students, faculty and staff.

Without a central facility, the University of Alberta Museums has little physical identity or visibility within the University or outside of the University. This lack of visibility and lack of understanding about the University of Alberta Museums hinder outreach and collaboration with external constituencies. Although the University of Alberta holds the largest collection in Alberta, and one of the largest in Canada, the University of Alberta Museums are not viewed by museum and university peers as a "museum" or a "university museum." This is simply because there is no physical space to observe or be seen as an operating museum. As a result, the University of Alberta Museums are not considered for:

- funding (e.g., peer reviewed grant programs);
- o partnerships with other museums or institutions;
- o participation in major university or museum initiatives; and
- o participation/membership in organizations or associations;

The following charts illustrate the potential museum/gallery/heritage funding-opportunity dollars that have been inaccessible as a result of the current situation (estimates based on one-time grants, or inability to apply for grants on an annual basis, extending from 1987 to the present). Lost research funding opportunities have not been assessed for this study.

Museum Funding from Federal Government and Related Agencies

GRANT/INFO	CHALLENGES	\$\$ LOST
CANADIAN HERITAGE Museums Assistance Program (MAP) MAP is the only federal grant program focused on funding museum operations	 Access and national outreach component not available as no facility to develop, prepare or display traveling exhibitions Lack of resources to provide matching \$ required Lack of staff resources to manage projects Not all MAP priorities relate to U of A Museums priorities 	 \$50,000 per year for 10 years (1997-2007) \$500,000
CANADIAN HERITAGE Cultural Spaces Grant	 Not eligible to receive funds as UofA has no facility devoted to arts and heritage 	\$200,000
CANADIAN HERITAGE Digital Future Canadian Culture Online New Media Research Networks Fund.	 No facility results in low visibility and makes it difficult to attract private or public partners No photography or digitization space, close to museum objects, is available Lack of resources for matching \$ Lack of staff resources to manage projects 	• \$1,500,000
CANADIAN HERITAGE Digital Future Canadian Culture Online Partnerships Fund	 No facility results in low visibility and makes it difficult to attract private or public partners No photography or digitization space close to museum objects, is available Lack of resources for matching \$ Lack of staff resources to manage 	\$1,000,000
CANADIAN HERITAGE Digital Future Virtual Museum of Canada Investment Program	 VMC priorities do not always relate to U of A Museum priorities Lack of staff resources to manage and supervise projects 	\$ 400,000
CULTURAL HUMAN RESOURCES COUNCIL Youth Internship Program	 Lack of resources for matching funds Lack of staff resources to manage and supervise projects 	• \$40,000
CANADA COUNCIL FOR THE ARTS Assistance to Art Museums and Public Galleries	 Eligible to receive operating grants until 1989 when RH1 gallery closed for Timms space. Timms space then repurposed away from museums Ineligible until 2007 as UofA did not have a permanent dedicated gallery space open to the public 	•\$40,000 per year for 18 years (1989-2007) • \$720,000
CANADA COUNCIL FOR THE ARTS Project Assistance to Visual Arts and Fine Craft organizations	 Eligible to receive project grants until 1989 when RH1 gallery closed for Timms space. Timms space then repurposed away from museums Ineligible until 2007 as UofA did not have a permanent dedicated gallery space open to the public 	 \$5,000 per year for 18 years (1989-2007) \$90,000
CANADA COUNCIL FOR THE ARTS Acquisition Assistance for Art Museums and Public Galleries	 Eligible to receive acquisition grants until 1989 when RH1 gallery closed for Timms space. Timms space then repurposed away from museums Ineligible until 2007 as UofA did not have a permanent dedicated gallery space open to the public 	 \$15,000 per year for 18 years (1989-2007) \$270,000
CANADA COUNCIL FOR THE ARTS /NSERC (Natural Sciences and Engineering Research Council) New Media Initiative	 No facility with digitization equipment, in proximity to museum objects, is available to facilitate new media partnerships Lack of staff resources to manage projects 	• \$200,000 per year for 5 years • \$1,000,000
NSERC Promo Science	 No facility to house science-related camps and programs Not successful in obtaining \$ from this program in the past due to inability to demonstrate sustainability. MUSE Program funded on a year to year basis solely through external grants. 	\$25,000 per year for 3 years\$75,000

Museum Funding from Provincial Government and Related Agencies

GRANT/INFO	CHALLENGES	\$ LOST
AB FOUNDATION FOR THE ARTS - A crown agency of the Government of Alberta formed in 1991 Operating Grants – Public Art Galleries	 Not eligible to receive grants directly or through "Friends" group as we did not have a permanent dedicated gallery space open to the public 2003 regulations changed/University as a whole applied for specific arts funding 	\$30,000 per year for 11 years (1992-2003)\$330,000
AB FOUNDATION FOR THE ARTS Project Grants – Visual Arts	 Funding not available to us for 10 years (1992-2002) as we did not have a permanent dedicated gallery space In 2003, became eligible due to change in regulations for project funding through University arts funding 	\$10,000 per year for 10 years\$100,000
MUSEUMS ALBERTA Regional Partnership Grants	 No facility results in low visibility Lack of facility creates difficulties attracting partners for joint projects Lack of staff resources to manage projects Lack of resources for matching \$ 	\$20,000 per year for 18 years\$360,000

Local Museum Funding

GRANT/INFO	CHALLENGES	\$ LOST
EDMONTON ARTS COUNCIL Lee Fund for the Arts	 No facility makes it difficult to host programs that engage children in the arts. Difficult to obtain \$ from this program due to inability to demonstrate sustainability of the MUSE Program. MUSE funded on a year to year basis solely through external grants Lack of resources for matching \$ Lack of staff resources to manage projects 	\$15,000 per year for 5 years\$45,000
TOTAL FUNDING LO	ST	\$6,630,000

Initial Capital Cost

The estimate on the following page assumes starting construction in October, 2009 for occupancy in the third quarter of 2012.

Cross Building Area	20.700	¢¢/M0	a
Gross Building Area	32,709	\$\$/M2	Cost
Space Type	0.046	#0.000	# 00 04 = 045
Frequently Accessed Collection	6,012	\$3,800 \$3,500	\$22,845,346
Infrequently Accessed Collection Research	3,817 3,540	\$3,500 \$4,000	\$13,357,896 \$14,159,750
Teaching	3,331	\$3,800	\$12,659,075
Artifact / Specimen Preparation	1,056	\$3,500	\$3,696,403
Registration / Cataloguing	682	\$3,500	\$2,386,563
Conservation	395	\$4,000	\$1,581,000
Digitization	496	\$3,500	\$1,736,000
Receiving	448	\$3,000	\$1,344,000
Public Facilities	439	\$3,800	\$1,668,200
Exhibit (teaching and research)	3,119	\$4,500	\$14,036,850
Exhibit Preparation Administration	800 2,178	\$4,000 \$3,500	\$3,200,000 \$7,623,000
Partnering Space	1,251	\$3,500	\$4,378,500
Other	1,940	\$3,500	\$6,788,688
Incinerator / Autoclave	42	\$4,000	\$168,000
DNA Reference Collection	50	\$4,000	\$200,000
Student / Community Resource Space Contemplative / Eureka Space c/w Garden Setting	56	\$3,500	\$196,000
(1 @ 40m2, 1 @ 20m2)	60	\$3,500	\$210,000
Ceremonial Space (1 @ 40m2, 1 @ 20m2)	60	\$4,000	\$240,000
Research Space / Hotelling Offices for Visiting Researchers (3	60	\$4,000	\$240,000
pods @ 35m2 each)	105	\$3,500	\$367,500
Special Event Space c/w Food Services	500	\$5,000	\$2,500,000
		·	
200 Person Lecture Hall (2 @ 280m2 each)	560	\$3,500	\$1,960,000
30 Person Lecture Hall (4 @ 42m2 each)	168	\$3,500	\$588,000
Large Conference Room for 14 People (16 @ 32m2 each)	512	\$3,500	\$1,792,000
Small Conference Room for 8 People (16 @ 20m2 each)	320	\$3,500	\$1,120,000
Touchdown Areas (16 @ 5m2 each)	80	\$3,500	\$280,000
Partnering Space (e.g. Alberta Museums Assoc.) incl. 12 offices,			
support space, recep	532	\$3,500	\$1,862,000
Staff (kitchen/coffee bar) (16 @ 10m2 each)	160	\$3,500	\$560,000
Outdoor Covered Activity Area			\$500,000
Outdoor Sculpture Garden			\$500,000
Sub-Total Building Cost	32,709	\$3,806	\$124,504,769
Site Development Cost		8%	\$9,960,382
Contingency - Design		5%	\$6,225,238
Contingency - Construction		10%	\$12,450,477
LEED Allowance	20.700	5%	\$6,225,238
Total Construction Cost	32,709	\$4,872	\$159,366,105 \$45,036,640
Furniture Fixtures and Equipment (Allowance) Escalation (Construction start Fall 2009)		10% 20%	\$15,936,610 \$31,873,221
Land Costs (Owned by University)		20 /6	\$31,073,221
Soft Costs Total		21%	\$33,466,882
Prime Consultant		9.50%	\$15,139,780
Specialty Consultants (Communications, Cost, Geo-tech,			<i>ϕ</i> . •, . • •, . • •
Elevator, Programming)		2.00%	\$3,187,322
Project Mgmt Office (PMO and UofA Overhead)		3.00%	\$4,780,983
Permits		0.35%	\$557,781
Owner Controlled Insurance Program		0.55%	\$876,514
Inspection QA / QC Services		1.00%	\$1,593,661
Temp Utility Allowance		0.80%	\$1,274,929
Commissioning FF & E Coordination		0.80% 1.00%	\$1,274,929 \$1,593,661
Moving Allowance		2.00%	\$1,593,661 \$3,187,322
Effective GST at 1.65%		1.65%	\$2,629,541
LITCOLIVE COT at 1.00/0		1.00 /0	Ψ ∠, U ∠ 3,U4 l
Project Cost	32,709	\$7,437	\$243,272,359

Capital Funding Sources

It is assumed that the capital required for construction will be provided through government grants, including Alberta Advanced Education and Technology and Alberta Infrastructure and Transportation. Initial capital requirements are estimated at \$10 to \$15 million in 2008 for design consulting fees and site preparation mobilization.

CRF Operating Costs

Functional Operating Costs

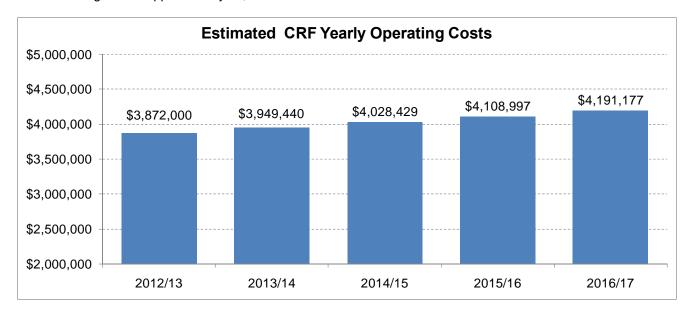
It is assumed that consolidation into one central curatorial location will create synergies and operational efficiencies. Further, it is likely that the CRF will make it easier to obtain grants to cover costs. Additional study is required to quantify the positive impact of the CRF. However, current staff costs are shown in below.

Staff	Number of Staff	2007 Total Loaded Salary
Museums and Collections Services ¹	13	\$1,302,000
Campus-wide Collections Staff ²	9	\$848,000
Total 2007 U of A Museums Staff	22	\$2,150,000

¹Note: Four positions are shared among four different departments.

Building Operating Costs

The chart below shows the estimated operating costs, starting in 2012. Inflation costs at 2%/year have been shown and will increase the costs throughout the years. A base operating cost of \$110.29 / square metre was applied to the overall building area of approximately 32,500 SM.



²Most collections staff have additional responsibilities as lab coordinators, instructors, research support, etc.

Section 10

Conclusions & Recommendations

Conclusions

Prompt action is required. The status quo, or "do nothing" scenario, is not a viable option because:

- Academic programs and their associated research and teaching will be cancelled; the University will lose faculty, staff, students and funding.
- Collections will have to be transferred (at a substantial financial and reputational cost) to other organizations/institutions.
- Donors and their donations will be declined.
- The status quo does not comply with legislation and retention of Canadian Heritage Category A status.
- The University master plan and migration plan state that several other programs are scheduled to relocate to current Collection locations.
- Collections are at risk due to poor facilities and lack of security.

This study has evaluated and summarized the organizational, operational, risks and costs of each alternative as follows:

follows:			
Alternative	Business & Operational Impact	Project Risk Assessment	Cost/Benefit Analysis
"Do nothing"	 Poor utilization of all resources. Does not enhance synergistic collaboration amongst staff, faculty and students. Does not demonstrate a leading-edge operational strategy. Hampers "state-of-the-art" technology implementation. Lack of resources to implement stopgap measures or operational improvements. 	 Large allocation of space and funds. Access limited or curtailed. Category A status will be lost along with substantial amounts of outside funding. Faculty, researchers and students will be difficult to attract and retain. Increased damage to collections will occur at substantial costs to both the University and society. Insurance costs for collections will increase. Other University-wide objectives that are relying on existing Collections space for their migrations will be delayed or stopped. Maintains pressure on, and inefficient use of space. Makes emergency preparedness and collection protection measures more difficult. 	 The cost of this strategy is substantial as it will result in loss of property, loss of reputation for the University and the University of Alberta Museums, loss of funding streams, and loss of faculty, researchers, staff and students. Collections will continue to be moved to accommodate University's building plans at considerable cost Status quo scenario will not provide the expected value of a respected center of learning for the University or the University of Alberta Museums.

Alternative	Business & Operational Impact	Project Risk Assessment	Cost/Benefit Analysis
Distributed Model	 Does not optimize utilization of resources. Collections remain difficult or impossible to access. Does not enhance synergistic collaboration amongst staff, faculty and students. Does not demonstrate a leading-edge operational strategy. Hinders "state-of-the-art" technology implementation. 	 Largest investment of space and funds. Category A status may remain at risk if all portions of the plan are not pursued. Requires largest amount of high-demand distributed spaces on the North Campus. Makes emergency preparedness and collection protection measures more difficult. 	 Most costly solution. Largest space use and largest funding needed of the four strategies. Does not optimize resources or create organizational value for University of Alberta Museums, associated departments, or the University.
Building Partnership Model	 Differing mandates do not enhance operational and synergistic compatibility. Does not completely consolidate collections. Collections may still be distant from home academic departments. Low visibility/branding/identity for U of A Museums. 	Relies on partnering with organizations and institutions to mutually protect the University's collections and assets.	 Does not optimize resources or create organizational value for University of Alberta Museums, associated departments, or the University. While it may be possible to share costs, it will also be more difficult to control costs.
Consolidated Model	 Easy access to collection for faculty, researchers and students. Facilitates/Promotes new interdisciplinary object-based research and teaching. Optimizes utilization of resources. Facilitates communication and collaboration amongst staff, faculty and students. Facilitates development of new academic and community programs (e.g., master's degree) Opportunity to create a strong brand identity for the University and the University of Alberta Museums through a leading-edge operational strategy and a dedicated facility. Supports "state-of-the-art" technology implementation. Requires the development of a strong Concept of Operations, and new protocols. 	 Most effective on North Campus. Minimized risk of damage or theft to collections. CRF staff may be isolated from home departments Streamlines emergency preparedness and collection protection measures for the University. 	Optimizes space use and minimizes operating costs and construction costs. Lowest overall costs coupled with the greatest operational value.

Major Conclusions

A new consolidated Curatorial Research Facility will help the University of Alberta positively compare with peer institutions. This new facility can help the University of Alberta Museums realize its goal to lead the world in integrated object-based research and discovery-based learning. Without the new Curatorial Research Facility, the University will lose its Category A status. Further, the University's vision of becoming "Top 20 by 2020" could be put at risk, as comparable institutions all have dedicated, purpose-built curatorial/museums facilities.

With an estimated 17 million objects and specimens, the University of Alberta is not only one of Canada's largest museum collections, but in selected disciplines, practices and vision, is among the very best in the world. Object-based research and teaching affects all citizens. Locally and globally, humankind gains knowledge, understanding, and answers to life's questions on critical topics as varied as climate change, biodiversity of species, the creative process, and multi-cultural issues. The University of Alberta is currently home to 35 research and teaching collections that are located throughout the campus in more than 110 rooms and facilities in 15 different buildings.

A new consolidated Curatorial Research Facility will establish the University of Alberta as **the world's leader in integrated object-based research and discovery-based learning.** The Curatorial Research Facility will:

- Promote the concept of interdisciplinary discovery-based learning;
- · Embrace the concept of shared facilities and resources;
- Inspire the creation of new academic and community programs;
- Enhance recruitment and retention of faculty and students;
- Ensure optimal academic use of collections by students, faculty and researchers;
- Facilitate the development and application of new and emerging technologies;
- Ensure compliance obligations are met through asset protection;
- Engage and integrate the community through programs that provide local and distant access;
- · Advance research goals and activities;
- Enable partnerships;
- Position the University advantageously among its peers.

Other conclusions are:

- The current conditions of curatorial collection space are putting irreplaceable collections, funding streams, University academic programs, and the reputation of the University, the Province and the country at risk.
- Move migration planning and other University-wide initiatives require pursuit of this project, or other current initiatives will be in jeopardy.
- A new facility would provide an opportunity to implement and demonstrate "state-of-the-art" technology, leadingedge operational models, improved utilization of resources, and would increase the visibility and brand identity of object-based research and teaching programs for the University of Alberta.
- The lack of available space with appropriate environmental storage and access conditions makes it difficult to actively solicit meaningful acquisitions.
- In keeping with the University's fourth Cornerstone in "Dare to Discover" (the University of Alberta Vision), the new facility is an important component to produce facilities that provide a transformative university experience.
- The new building will enhance and expand the technology infrastructure and offerings to extend the University's reach and "Discovery Learning" offerings.

Recommendations

It is recommended that the University pursue the strategy of consolidating all 35 academic museum collections in one facility, thereby optimizing the utilization of resources and creating the most value for the University and University departments. This consolidated Curatorial Research Facility must be located on the North Campus, where faculty, staff and students can maintain connections to their home academic departments

The next step includes selecting the site for the facility, and further developing detailed programming and operational concepts for uniting the 35 collections, the faculty, and staff.

Project Responsibility

Planning, design and construction of the project is the responsibility of the University of Alberta, specifically the portfolio of Facilities & Operations (F&O) for the development of the general and detailed space program, and the Department of Capital Programs (CP)/Project Management Office for the administration of the construction of the project. The Project Manager has the overall accountability for ensuring the project is delivered on time, on budget and of the required quality.

Project Accountability

The Board of Governors of the University of Alberta has ultimate accountability for the project. Under normal circumstances, the Dean/Chair of the Faculty/Department would assume the role of Project Sponsor. In this case, as the Museum Arts and Sciences Council is in the development process, and as all major stakeholders are deans and chairs responsible for faculty/departmental collections and associated academic programs, the Provost and Vice-President Academic will be accountable for ensuring that the project incorporates the required research elements and delivers the program.

Section 1

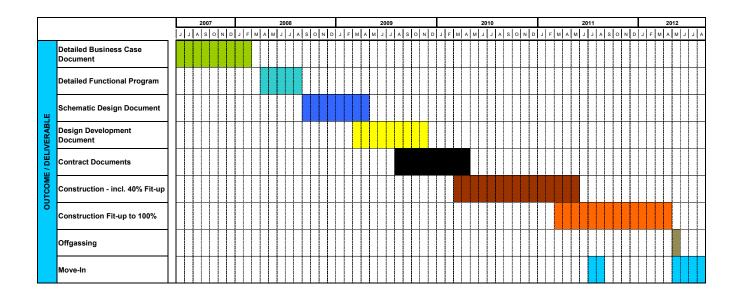
Implementation Strategy

Project Milestones

To maintain the project parameters (scope, budget, and schedule), a planned series of project milestone dates have been established to outline an efficient project process. These milestone activities are as follows:

Project Phase	Completion Date	Activity
Business Case	May 2008	Presents project objectives to approving authorities supporting the need for the project. Involvement by the Federal & Alberta governments and the University for acceptance of program and funding support.
Detailed Functional Program	August 2008	Provides detailed space requirements and square footage for all of the areas within the building.
Schematic Design	April 2009	Expands requirements of the approved functional program to confirm and provide space fit-up for the building. Involves user stakeholders, consultant team and the University. Requires University approval prior to proceeding to the next phase.
Design Development	November 2009	Provides final details to confirm user needs and project design requirements prior to commencing with contract drawings. Involves user stakeholders, consultant team and the University. Requires University approval prior to proceeding to the next phase.
Contract Documents	April 2010	Translates the design into drawings that can be used to determine the project construction cost as well as provides the required details for the constructor to erect the building. Involves user stakeholders, consultant team and the University. Requires University approval of scope and costs prior to proceeding to the next phase.
Construction (40% Fit-up)	May 2011	Completes the shell of the structure to enable fit-up of collections space to a level of 40% for early transition and occupancy of the new facility. Involves user stakeholders, design team, constructor, and University. Transfer of collections will depend upon the degree of completion, safety, security and climate control available in the new facility. Careful planning and coordination will be required.
Construction (100% Fit-up)	April 2012	Completes the building in its entirety. Involves user stakeholders, design team, constructor, and University.
Off gassing	May 2012	Once the facility is constructed, new construction materials and products are given time for chemicals to dissipate and evaporate before move-in.
Move-in	August 2012	All staff, furniture, equipment and assets are located in the facility.

High Level Project Schedule



Review & Approval Process

Review and Approval Process

The review and approval process for major capital projects is a multi-stepped process vetted through five University committees.

Strategic Initiative Group (SIG)

The Deputy Provost chairs this committee. Members include Directors and/or senior staff from Capital & Strategic Planning Services, Capital Programs, the Office of the Vice-President (Research), Human Resources, Resource Planning, the Office of the Vice-President (Finance & Administration), Strategic Analysis and External Relations. This committee reviews all major initiatives brought forward by Faculties.

Executive Planning Committee (EPC)

The Vice-President (Academic) and Provost chairs this group. Members include the Vice-President (Research), the Vice-President (Finance & Administration), the Vice-President (Facilities & Operations), the Vice-President (External Relations) and resource staff. This committee reviews and approves all major initiatives recommended by SIG. The EPC's approval is required before a major capital project can proceed further in the approval process.

Board Finance and Property Committee (BFPC)

This committee's approval is required to advance funding to a project for the purposes of entering into the program, schematic and early design development stages. They will also recommend to the Board of Governors final approval (following the review of the Facilities Development Committee as detailed below) of the expenditure of the balance of the funding.

Facilities Development Committee (FDC)

This is a subcommittee of the General Faculties Committee (GFC) and is accountable for approving the general and detailed space program, site selection, schematic design and design development.

Board of Governors of the University of Alberta.

The Board of Governors of the University of Alberta must approve all major capital expenditures of \$5M or greater.

Appendix A

Canadian Heritage Category A Status Requirements

Criteria for Category A Designation

(taken from: http://www.pch.gc.ca/progs/mcp-bcm/pubs/designation 2000-06/designation 2000-06 e.pdf)

An organization would apply for Category 'A' designation if it is a well-established custodial institution with exhibition and storage facilities and professional staff appropriate to the size and nature of the collection in place.

To be considered for Category 'A' designation, an institution must:

- 1. meet the legal requirements for designation;
- 2. have been in operation for at least one year;
- 3. have, as its primary mandate, the collection, preservation, and exhibition of certain classes of cultural property as set out in, but not limited to, the *Canadian Cultural Property Export Control List*, as follows:

Group I Objects Recovered from the Soil or Waters of Canada

Group II Objects of Ethnographic Material Culture

Group III Military Objects

Group IV Objects of Applied and Decorative Art

Group V Objects of Fine Art

Group VI Scientific or Technological Objects

Group VII Textual Records, Graphic Records and Sound Recording

Group VIII Musical Instruments

- 4. have a collection in place which it preserves and displays to the public;
- 5. be open to the public on a regular basis throughout the year;
- 6. have a full-time paid professional staff of an appropriate size and with appropriate qualifications;
- 7. actively acquire property that is likely to meet the criteria of "outstanding significance and national importance" established under section 11 of the *Cultural Property Export and Import Act*.
- 8. have comprehensive collections management, exhibition, conservation, acquisition, and deaccessioning policies that are revised every few years;
- 9. maintain appropriate standards of relative humidity and temperature control, air filtration and lighting in the areas in which the cultural property is displayed and stored;
- 10. have a security policy and a fire safety policy that are revised every few years;
- 11. demonstrate that appropriate security and fire protection measures are in place for the collection;
- 12. have a disaster plan that is updated annually;
- 13. demonstrate that appropriate measures have been taken to protect collections from the damaging effects of water, earthquakes, and other such emergencies.

IV. LEGAL REQUIREMENTS FOR DESIGNATION

Organizations that wish to apply for Category 'A' or Category 'B' designation status must have a legal jurisdiction that corresponds to one of the following two definitions as established in section 2 of the *Cultural Property Export and Import Act (Act):*

"institution" means an institution that is publicly owned and is operated solely for the benefit of the public, that is established for educational or cultural purposes and that conserves objects and exhibits them or otherwise makes them available to the public:

"public authority" means Her Majesty in right of Canada or a province, an agent of Her Majesty in either such right, a municipality in Canada, a municipal or public body performing a junction of government in Canada or a corporation performing a function or duty on behalf of Her Majesty in right of Canada or a province.

Government or University Institutions

Institutions that operate under the jurisdiction of a government (i.e. a public authority), or university are normally considered to meet the legal criteria for designation by virtue of the public nature of their establishment.

Specifically, such institutions:

- 1. operate under the direct control of a public authority, that is, the Government of Canada, a province, or a municipality; or
- are non-profit publicly owned and established by acts of Parliament or a provincial legislature which report to Parliament or the legislature through a Board of Trustees (e.g. National Gallery of Canada, National Archives of Canada); or
- 3. are under the direct control of publicly owned universities and colleges (e.g. Museum of Anthropology, University of British Columbia).

It is important to note that public authorities or universities, as a whole, are not eligible for Category 'A' designation since they do not have the principle mandate to collect and preserve cultural property and to make such material available to the public. They may, however, be considered for a "one-time" Category 'B' designation in relation to a specific proposed acquisition. As an example, the Carleton University Archives, not Carleton University, is a Category 'A' institution. However, Carleton University could be considered for Category 'B' designation in relation, for example, to an outdoor sculpture to be displayed on campus grounds

Remember...

Category 'A' designation applies only to those classes of objects that are directly linked to the collecting mandate of the institution. If a Category 'A' institution wishes to apply to the Review Board for an income tax certificate for an acquisition that does not fall within the institution's normal collecting mandate, an application for Category 'B' is normally required.

Because many public authorities, universities and other publicly-funded educational facilities do not have as their principal mandate the collection, preservation and exhibition of cultural property, the entire facility would not normally be eligible for Category 'A' designation. However, collecting institutions that operate under the jurisdiction of a public authority, university or other publicly-funded educational facility may be considered for designation, even though they may not have a separate legal identity. In the case of an art gallery that operates under the jurisdiction of a university, for example, only the art gallery component and its exhibition and storage areas would normally be considered for designation.

Appendix B

Historical Synopsis of Building Partnership Discussions with Other Institutions

A. Government of Alberta Partnership

"...the Alberta government is responsible for over 11 million precious and valuable objects, 19 historic sites, four major museums, and more than 500 provincial parks and protected areas. ... the provincial government will proceed to renew and expand the Royal Alberta Museum as a world class showcase dedicated to promoting, preserving and celebrating Alberta's history."

From **The 20-Year Strategic Capital Plan** to address Alberta's infrastructure needs January 29, 2008

- 2001: Government of Alberta and University of Alberta signed a Memorandum of Understanding to investigate the potential for partnering on heritage facilities. The Provincial Museum of Alberta (now known as the Royal Alberta Museum) was being considered for a renovation. The RAM, along with other provincial facilities and heritage sites also suffered from space shortages for museum quality storage, etc.
- 2001 2003: Discussions were held between the Government of Alberta and University of Alberta to determine if one facility could be conceived that addressed the needs of both the University and the Government. Consideration was given to merging both entities or co-habiting in one facility as separate entities.
- Ultimately, the Government of Alberta decided that the mission/mandate of the RAM is "to preserve and tell the story
 of Alberta the experience of people and places over time ..." with an emphasis on front-of-house operations. This
 is fundamentally different from the University of Alberta Museums role as an international research and teaching
 organization. Therefore, it was determined that a building consolidation or co-mingling model would not meet either
 organization's needs.
- The Government of Alberta chose to renovate the RAM on its existing site. In the intervening years, the RAM has developed a renewal plan for the building which focuses on public access through "feature galleries, traveling exhibitions, programs and events...a tourist destination and a year-round resource for all Albertans".
- With the emphasis on front-of-house development for the RAM, the Government of Alberta still has a need for offsite storage for the RAM and many of its collections. In 2006, the Government alluded to a potential partnership with the U of A Museums for off-site storage. However, as previously stated, the University of Alberta Museums will limit the acquisition of low-use collections.
- The opportunity for collaboration/partnership regarding programming, research and teaching exists, and can be further pursued.

B. The Art Gallery of Alberta

- During the time that the U of A was negotiating with the Government of Alberta, discussions were held with the
 Executive Director of the Art Gallery of Alberta. The AGA decided to rebuild on its existing site which is currently in
 process.
- The AGA is temporarily using Enterprise Square (a U of A building) for its exhibitions/administration and programming, and built off-site storage. The AGA is scheduled to vacate in 2009.
- The AGA's Collection Services Facility (CSF) became operational in December 2006 with 18,000 square feet of
 museum quality-controlled environment in downtown Edmonton. The CSF also offers the capacity for staff to work
 more productively in areas like the TREX traveling exhibition programs and digitizing the collection.
- There is still a possibility of partnering with the AGA on additional off-site storage as they have little capacity in their CSF for growth.
- The AGA's permanent collection is 7000 artworks valued at close to \$33 million.

Appendix C

List of Collections

Faculty of Agricultural, Life and Environmental Sciences

Devonian Botanic Garden

DBG Herbarium

Department of Human Ecology

Clothing and Textiles Collection

Department of Renewable Resources

Dendrology Collection

Soil Science Monolith Collection

Wildlife Collection

Faculty of Arts

Department of Anthropology

Archaeology Collection

Ethnographic Collection

Fossil Hominid Cast Collection

Osteology Collection

Zooarchaeology Reference Collection

Department of Art and Design

Division Print Collection

Department of History and Classics

W.G. Hardy Collection of Ancient Near Eastern and Classical Antiquities

Department of Modern Languages and Cultural Studies

Bohdan Medwidsky Ukrainian Folklore Archives

Department of Music

The Canadian Centre for Ethnomusicology/ FolkwaysAlive

Faculty of Engineering

Engineering Collection

Faculty of Medicine and Dentistry

Department of Dentistry and Oral Hygiene

Dentistry Museum Collection

Department of Laboratory Medicine and Pathology

Pathology Gross Teaching Collection

Museums and Collections Services

University of Alberta Art Collection

Mactaggart Art Collection

Faculty of Science

Department of Biological Sciences

Cryptogamic Herbarium

E.H. Strickland Entomological Museum

Freshwater Invertebrate Collection

Paleobotanical Collection

Parasitology Collection

Vascular Plant Herbarium

University of Alberta Museum of Zoology:

Amphibian and Reptile Collection

Ichthyology Collection

The Jim van Es Invertebrate and Malacology Collection Mammalogy Collection Ornithology Collection

Departments of Biological Sciences and Earth and Atmospheric Sciences Laboratory for Vertebrate Paleontology

Department of Earth and Atmospheric Sciences

Meteorite Collection
Mineralogy Collection
Paleontology Collections
Petrology Collection
Shell Canada Drill Core Collection

Appendix D

University of Alberta Vision for the University of Alberta Museums

Excerpt from the minutes of the Primary Stakeholders Meeting May 9, 2006

(full minutes available in the University of Alberta Museums General Programme Phase II)

4.0 The University Vision for the U of A Museums

Dr. Carl Amrhein, joined the meeting in progress to discuss the current state of the University of Alberta Museums and the recently developed vision to address their needs. He indicated that it has become increasingly apparent to the University that its museum facilities were in a difficult situation. The Federal Cultural Property Review confirmed these concerns, by suggesting that our Category A status would be revoked if we did not address several problems. Dr. Amrhein indicated that this designation is important to the University, as is our ability to comply with other legislation, federal grant regulations, and professional standards. The University is cognizant of the Phase I General Programme Study and Dr. Amrhein said that the cost of upgrading all current building locations that house collections is not only prohibitive, but in many cases not physically possible due to a range of conditions.

Therefore, the University is recommending that the development of a single curatorial facility to accommodate all collections and their associated research and teaching functions be given serious consideration. Dr. Amrhein said it is understood that individual museum collections must be tied to their departments and faculties. The vision for a single facility would include the museum collections, classrooms and research labs; with strong links back to Departments to satisfy academic mandates. He stated that the University envisions a range of technologies and lab facilities to accommodate activities such as digitization and conservation.

Dr. Amrhein stated that, in agreement with all of the Vice-Presidents, a single new facility is now the top priority on the University's capital project list.

Dr. Amrhein [stated] that to ensure that the facility is fully accessible for teaching and research, it is understood that the location should be on the main campus: north of 87th avenue and south of Saskatchewan Drive.

Appendix E

University of Alberta Museums and Collections Policy

Approved by the Board of Governors March 28, 2008.

Museums and Collections Policy

Office of Accountability:	Provost and Vice-President (Academic)
Office of Administrative Responsibility:	Museums and Collections Services
Approver:	Board of Governors

Overview

Museums and **collections** have been integral to the University of Alberta's teaching, research and community service programs since it was founded in 1908. The University maintains museums and collections in a range of disciplines in the humanities and sciences. The museums and collections are also integral to the faculties and departments that use them in support of their academic programs. The museums and collections are coordinated as the University of Alberta Museums with an institution-wide administrative framework, and in accordance with applicable laws, agreements, conventions, treaties and Tri-Council requirements.

Purpose

To define the University's responsibilities and accountabilities related to museum issues and **museum objects and collections**.

To ensure that faculty, staff, students, researchers and all others acquiring, using or responsible for museum objects and collections for research, teaching and other university-related purposes, know the expectations of the University of Alberta.

POLICY

Compliance with University policy extends to all members of the University community. [A Top]

1. COMPLIANCE

The University of Alberta's museums and collections will be compliant with applicable professional museum standards of practice and ethical guidelines; provincial and federal laws; and international agreements, conventions and treaties which the university is a party to or is otherwise bound by, including but not limited to the Tri-Council Framework for Researchers Working with University-based Collections, Government of Alberta "Disposition of Museum Collections and Objects" (1996), and the Canadian Cultural Property Export and Import Act.

As with all University policy and associated procedure, non-compliance constitutes misconduct, and may be pursued under the applicable collective agreement or University Policy. The University reserves the right to recover, in accordance with the appropriate University procedure, any profit or financial benefit achieved by a person or to recover fines assessed against the University as a result of non-compliance.

2. ESTABLISHMENT OF COLLECTIONS

Proposed establishment of new collections, by individuals or **units**, must be approved in advance by the **University of Alberta Museums Policy and Planning Committee**.

Individuals who are required to collect or have collected museum objects on behalf of the University of Alberta must, in consultation with their unit head and **Museums and Collections Services**, identify an existing registered collection or establish a new registered collection as a permanent repository for museum objects and/or museum collections.

3. ACQUISITION OF COLLECTIONS

Only units that are registered with Museums and Collections Services as part of the University of Alberta Museums and that have an approved **Acquisition and Management Strategy** may acquire museum objects and operate museum facilities that contain museum objects and collections.

Unless otherwise specified in a registered collection's approved Acquisition and Management Strategy, before negotiations are undertaken with potential donors of museum objects or collections, the Executive Director, Museums and Collections Services or designate, must be notified. The potential donation will be assessed against established criteria to determine whether approval to proceed will be granted.

Unless otherwise specified in a registered collection's approved Acquisition and Management Strategy, before undertaking transactions to purchase museum objects or collections, the Executive Director, Museums and Collections Services or designate, must be notified. The potential purchase will be assessed against established criteria to determine whether approval to proceed will be granted.

4. OWNERSHIP

Museum objects and collections collected on behalf of the University, by individuals or units, are the exclusive property of the University. Alternative **public trust** arrangements must be first approved by the University of Alberta Museums Policy and Planning Committee, and then by the Board of Governors or designate which is currently the Provost and Vice-President (Academic).

Museum objects and collections collected by Centres or Institutes of the University of Alberta are the property of the University of Alberta, and the collections will be governed by the policies and procedures of the University of Alberta. If a Centre or Institute terminates or closes, its collection becomes the responsibility of the unit to which the Centre or Institute reported.

5. ETHICS

University staff will comply with ethical standards relating to collecting and those specific to their disciplines, in order to maintain the integrity of the collection and to warrant public confidence in the University's collecting activities.

In their personal collecting, University staff will comply with the University's Conflict Policy specifically but not limited to their unit's collection.

6. ACCREDITATION REQUIREMENTS

The University will comply with the conditions required by the Department of Canadian Heritage to maintain the University of Alberta Museum's **Category "A" designation**.

All applications for **certification of cultural property** for income tax purposes, Moveable Cultural Property Grants, and CITES permits (Convention on International Trade in Endangered Species of Wild Fauna and Flora) must be coordinated and submitted by Museums and Collections Services on behalf of the University of Alberta.

7. LOANS

Normally, units will lend museum objects and/or collections material only to other universities, museums, or similar educational non-profit institutions or to government agencies. Loans must be for purposes relating to research,

display, education, conservation or restoration, authentication, or photography. Loans to individuals will be approved on a case-by-case basis according to criteria identified in a registered museum collection's approved Acquisition and Management Strategy.

Units may borrow objects from other units, individuals or institutions for specific periods of time, for purposes relating to research, display, education, conservation or restoration, authentication, or photography.

8. DEACCESSIONING OF COLLECTIONS

The University recognizes that there must always be a strong presumption against the permanent removal of objects for which the University of Alberta has assumed title. The University of Alberta will permit **deaccessioning** of a single object or a collection of objects subject to the approval of the University of Alberta Museums Policy and Planning Committee and the Board of Governors or designate, which is currently the Provost and Vice-President (Academic), and in compliance with Provincial and Federal government policy and legislation.

9. RETURN OF CULTURAL PROPERTY

All claims for the return of **cultural property** or **repatriation** of cultural property from the collections of the University will be reviewed and considered on a case-by-case basis, guided by the policies of the University and applicable laws. Although the University may have obtained the objects in good faith, it respects the legitimate interests of others.

10. ACCESS

Where appropriate and feasible, and where not restricted by legislation, **access** to the University's collections and associated documentation will be provided to faculty, staff, students, and researchers of the University and communities beyond the University.

DEFINITIONS

Any definitions listed in the wide use.	ne following table apply to this document only with no implied or intended institution-
Museum(s)	A museum is a non-profit making, permanent institution in the service of society and of its development, and open to the public, which acquires, conserves, researches, communicates and exhibits, for purposes of study, education and enjoyment, material evidence of people and their environment. (Source: Alberta Museums Association)
Collection(s)	Related objects and the information resources associated with them may be designated as a collection. A unit may have one or more collections of museum objects within its jurisdiction.

Museum objects /Museum Museum **objects** and collections are rare and unique, and hence objects and collections irreplaceable, or represent declining or limited resources. The museum objects and collections governed by this policy shall include, but may not be limited to: objects acquired by University staff and students, current and past, as part of their teaching, research or curatorial activities at the University, and for which the University holds title; objects acquired by the University that relate to its mission, history, and teaching and research programs, and for which the University holds title: objects acquired by University staff and students, but which are the property of the Crown and are held at the University; information resources that provide documentation for an object or collection. Exceptions to the above include: living material: and objects that may normally require replacement after study or research. Unit(s) A designation used to denote academic and non-academic Departments. Faculties, Schools, Institutes and Centres at the University of Alberta. **University of Alberta Museums** A standing committee of the Provost and Vice-President (Academic) with **Policy and Planning Committee** campus-wide representation, that advises on matters relating to the University of Alberta museums and collections. **Museums and Collections** The unit charged with the responsibility of ensuring that the University of **Services** Alberta is in compliance with this policy and associated procedures. Acquisition The appropriately documented transfer of title (that is, legal ownership and responsibility) that accompanies any object acquired by the University of Alberta, whether through field collection, donation, purchase, transfer, exchange or any other method. **Acquisition and Management** A document required of each registered collection at the University of Strategy Alberta that describes the scope and uses of the collection, principles for acquiring museum objects, and management strategies to ensure the collection complies with University policy. **Public Trust** The obligation placed on trustees to maintain and preserve cultural and natural resources and to ensure that these resources remain in the public domain for the benefit of current and future generations. Category "A" Designation Designation of institutions and public authorities under the Cultural Property Export and Import Act is a means of ensuring that institutions applying for cultural property grants and loans, or for Cultural Property Income Tax Certificates (T871s), meet certain legal, curatorial and environmental requirements. Category 'A' designation is granted for an indefinite period of time to institutions and public authorities that are well established and meet all of the criteria for designation. They are eligible to make applications to the Canadian Cultural Property Export Review Board to have cultural

property acquisitions certified for income tax purposes and to apply for Movable Cultural Property Grants to assist with the acquisition of cultural property objects that exist outside Canada or that are threatened with export.
Cultural property that has gone through the certification process and been designated, by the Canadian Cultural Property Export Review Board, as being of outstanding significance and national importance. Certification includes a determination by the Board regarding the fair market value, for income tax purposes, assigned to the object.
The process of formally removing an object from the permanent collection or an object that has been permanently removed from the collection. The first stage, "deaccessioning," is the formal review and decision-making process that leads to the removal of objects from the collection and to the formal adjustment of registration records. The second stage, "disposition," is the actual discard or transfer of ownership and possession of deaccessioned objects.
Any item that, regardless of its place of origin, may be considered important from an archaeological, prehistorical, historical, artistic or scientific perspective, can be considered "cultural property."
The process of restoring or returning objects to the culture, nationality or country of origin. Repatriation can be requested by representatives of the object's culture, nationality or country or it can be initiated by the museum. The process can be undertaken on legal and/or moral grounds.
A fundamental responsibility of museums, requiring them to make their resources available to all potential users. Access provision can be considered in both physical and intellectual terms.
An artifact or specimen. Artifacts are objects created, manufactured or produced by humans; a product of human art, craft or workmanship. A specimen is an individual or part that serves as an example of a class or whole; refers to an individual plant or animal or piece or a mineral, etc. collected and used for scientific or educational purposes.
Any object or collection of objects acquired by the University of Alberta at one time from a single source as a permanent addition to its collections; or the process of formally accepting an object into the University's permanent collections.

RELATED LINKS

Should a link fail, please contact uappol@ualberta.ca.

Alberta Museums Association

Canadian Cultural Property Export Review Board (Canadian Heritage, Government of Canada)

Canadian Museums Association Ethical Guidelines (1999)

<u>Conflict Policy - Conflict of Interest and Commitment, and Institutional Conflict</u> (University of Alberta)

Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)

Copyright Act (Government of Canada)

Cultural Property Export and Import Act (Government of Canada)

Centres and Institutes Policy (University of Alberta)

Disposition of Museum Collections and Objects (1996) (Government of Alberta)

International Council of Museums Website

University of Alberta Museums and Collections Services

Museums Policy and Planning Committee Terms of Reference (University of Alberta)

<u>Tri-Council Framework for Researchers Working with University-based Collections</u> (Natural Sciences and Engineering Research Council of Canada, Government of Canada)

<u>Tri-Council Memorandum of Understanding on the Roles and Responsibilities in the Management of Federal Grants and Awards</u> (Natural Sciences and Engineering Research Council of Canada, Government of Canada)

Appendix F

University of Alberta Museums Policy and Planning Committee

Dr. Mike Caldwell, Department of Biological Sciences, Chair

Janine Andrews, Executive Director, Museums and Collections Services/LSE

Dr. Tom Kieren, President, Friends of the University of Alberta Museums

Dr. Jeremy Mouat, Chair of Social Sciences, Augustana Campus (General Faculties Council Elected)

David Jones, Map Librarian (General Faculties Council Elected)

Dr. Heather Proctor, Department of Biological Sciences

Dr. Chris Herd, Department of Earth & Atmospheric Science

Dr. Pam Willoughby, Department of Anthropology

Dr. Alison Murray, Department of Biological Sciences

Elysia Donald, Department of Human Ecology (Undergraduate Student Representative)

Jason Dombroskie, Department of Biological Sciences (Graduate Students Association Elected)

Frannie Blondheim, Museums and Collections Services (non-voting)

Curatorial Facility Academic Program Advisory Committee

Dr. Olive Yonge, Vice-Provost (Academic Programs), Chair

Dr. Marco Adria, Director, Graduate Program in Communications and Technology, Faculty of Extension

Dr. Anna Altmann, Director, School of Library and Information Studies (2007)

Janine Andrews, Executive Director, Museums and Collections Services/LSE

Frannie Blondheim, Associate Director, Museums and Collections Services

Brittney Bugler, representative for VP Academic, Students' Union (2007-08)

Dr. Michael Caldwell, Professor and Chair, UofA Museums Policy and Planning Committee

Dr. Ann Curry, Director, School of Library and Information Studies (2008)

Tooraj Freeman, VP Academic, Graduate Students' Association (2007-08)

David Goa, Director, Chester Ronning Centre for the Study of Religion and Public Life, Augustana Campus

Amanda Henry, VP Academic, Students' Union (2006-07)

Robin Hao, VP Academic, Graduate Students Association (2006-07)

Heather Hogg, Assistant Dean, Graduate Studies and Research

Ernie Ingles, Vice-Provost (Learning Services) and Chief Librarian

Professor Liz Ingram, Department of Art & Design

Katharine Moore, Assistant Vice-President Research, Office of the VP Research