



Estonian Canadian Museum and Archives (VEMU)

Feasibility Study: Final Report

June 2019

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Executive Summary

The Estonian Canadian academic community built Tartu College on Bloor Street West in Toronto as a student residence in 1970. The College soon began to collect archival material associated with the Estonian Canadian experience and the Estonian diaspora. As the archival and other collections continued to grow, the College established the Estonian Studies Centre in 2011. The Centre occupies a limited amount of space on the lower level of Tartu College, and has focused primarily on its archival responsibilities.

The mission of the Estonian Studies Centre is to “advance the cultural heritage of Estonian Canadians.” To better enable the Centre to achieve this mission, additional exhibition and programming spaces are required in a proposed Estonian Canadian Museum and Archives (VEMU). Architect Alar Kongats was retained to develop a space and facilities plan for the new Museum. Lord Cultural Resources was then engaged to prepare this feasibility study for it.

The recommendations and assumptions that underlie the attendance and financial projections in this feasibility study are based on contextual, comparables and market analyses, an interview process and the judgment and experience of the consultants. Among the main recommendations/assumptions are the following points:

- The site for the Estonian Canadian Museum and Archives (VEMU) will be at 310 Bloor West at Madison Avenue, connected to Tartu College and adjacent to the planned International Estonian Centre. This area will be, in essence, an Estonian cultural and educational hub.
- The Museum will offer approximately 6,900 net square feet (640 net sq. metres) of usable space, or about 10,000 gross square feet (928 sq. metres) of total space at a capital cost of about \$7.6 million. The Museum will also have access to the existing 8,700 gross sq. ft. of archival space of the Estonian Studies Centre.
- Exhibitions will include background information on Estonian history and culture, but focus primarily on the Estonian Canadian experience.
- The Museum will operate for five days per week, closed on Sundays and Mondays, and offer evening hours on Tuesdays to link to evening hours on those days of the Toronto Estonian School in the adjacent International Estonian Centre and on Thursdays to the hours of the nearby Bata Shoe Museum.
- Admission to exhibitions will normally be free of charge, but donations will be sought. Earned income will also be generated from retail, rentals, programs, a fundraising gala and memberships. An endowment to support operations is also assumed. As is common with culturally specific museums in Canada, most operating funds will be required from donations and sponsorships of the Estonian community through Tartu College.

- Staffing levels will increase from the existing 2.5 FTE of the Estonian Studies Centre to 7.45 FTE with implementation of the Museum. Staff will be supported by volunteers.

Attendance is projected to stabilize at 21,000 annual visitors, and will be higher in the opening year at 25,000. The operating budget for the Estonian Studies Centre, which will govern the Museum, will increase from a base level about \$491,000 to a range of \$1.1 million with implementation of the new Museum. Revenues will grow with more income from rentals, retail, fundraising events and other earned income sources as well as an endowment to support operations.

The projections also assume that base levels of funding support from Tartu College and donations will be maintained and that Tartu College will continue to absorb building occupancy costs and pay for part of the Museum's staffing costs, as it does with the existing Estonian Studies Centre.

The bottom line of the projections indicate the combined annual additional amounts required from Tartu College and donations, largely from within the Estonian community and from Estonia and government sources in Canada, will be in the range of \$243,000 to \$270,000.

The Boards of Tartu College and the Estonian Studies Centre will determine whether these additional amounts are achievable in the context of a new Estonian Canadian Museum and Archives (VEMU) that will better enable the mission of the Estonian Studies Centre to "advance the cultural heritage of Estonian Canadians" to be achieved.

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1. Introduction

This chapter summarizes the background to and purpose of this Feasibility Study for the planned Estonian Canadian Museum and Archives as well as the methodology to conduct it. In Estonian it would be referred to as the Vällis-Eesti Museum (VEMU). This report therefore refers to the Estonian Canadian Museum and Archives (VEMU) throughout or sometimes only to VEMU or the Museum.

1.1 Background to and Need for the Feasibility Study

The Estonian Canadian academic community built Tartu College on Bloor Street West in Toronto as a student residence in 1970. This followed establishment of the legal structure of the College as a member based not-for-profit Corporation in 1967. The College soon began to collect archival material associated with the Estonian Canadian experience and of the Estonian diaspora in Tartu Institute's Dr. Endel Aruja Archives and Library. As the archival and other collections continued to grow, the College outsourced its Estonian objects and programming to a registered charity that it established in 2011, known as the Estonian Studies Centre (ESC). The mission of the ESC is to “advance the cultural heritage of Estonian Canadians.”

The Estonian Studies Centre currently occupies about 18,700 gross square feet (1,736 sq. metres) of space on the lower level of the College and is largely funded by Tartu College. However, the existing space is inadequate for archival needs that are expanding. There are also inadequate exhibition and programming spaces.

It is the goal of the Estonian Studies Centre to establish an Estonian Canadian Museum and Archives (VEMU) to be connected to Tartu College and adjacent to a planned International Estonian Centre, which is scheduled to open in 2021. The International Estonian Centre is to be an events space and a place to celebrate the achievements of Estonians in Canada and elsewhere. The Centre will include a banquet hall and performance space, music room, classrooms, meeting and study space, and a rooftop terrace. It will also provide office and retail space for the Estonian Credit Union, the Estonian Foundation of Canada, an Accelerator and a potential Estonian government office. The Estonian Canadian Museum and Archives (VEMU) is planned to complement, not compete with, the International Estonian Centre and will focus on additional archival spaces and more museum exhibition, programming and storage spaces.

The ESC engaged architect Alar Kongats to prepare an architectural concept for the new Museum, but recognized the need for feedback from a museum-specialist facility planner as part of an operations-focused feasibility study for the project.

Lord Cultural Resources, the largest firm in the world specializing in the planning of museums and related institutions, was engaged by the Estonian Studies Centre and Tartu College to conduct this feasibility study. It is led by the Ted Silberberg, the Lord Cultural Resources Senior Principal responsible for Market and Financial Planning, and by Sean Stanwick, Director of Facility Planning. Research assistance was provided by Rebecca Frerotte. Lord Cultural Resources is honoured to have been previously engaged to be the museum planners for the Estonian National Museum in Tartu, and consultants for the Art Museum of Estonia (KUMU).

1.2 Scope of Work and Methodology

The scope of work and methodology of Lord Cultural Resources in conducting this study is summarized below and includes the following tasks. We:

- Reviewed background information associated with the project. This included site plans and architectural concepts, and other plans for both the Estonian Canadian Museum and Archives (VEMU) and the International Estonian Centre. Also reviewed were staffing and financial information for both Tartu College and the Estonian Studies Centre, as well as programming and other information regarding current initiatives.
- Toured the existing Estonian Studies Centre spaces within Tartu College and the sites for both the Estonian Canadian Museum and Archives (VEMU) and International Estonian Centre, and the areas around them.
- Facilitated a vision/assumptions workshop with Board members and staff of Tartu College and the Estonian Studies Centre, and other invited participants. Please see Appendix A which acknowledges both the workshop and interview participants.
- Compiled and analyzed available contextual data and conducted interviews regarding selected culturally specific and nearby museums in the Toronto area, as well as museums in the United States that focus on Baltic ethnicities. We also compiled and analyzed data regarding potential resident, school and tourist markets for Toronto and VEMU in particular. These analyses are set out in Chapters 2 and 3 of this report.
- Provided observations and recommended modifications to the current facility plans and developed operational recommendations and assumptions for the new Museum, which are set out in Chapter 4.
- Prepared a Phase 1 report that was reviewed with Board members and senior management. This served to finalize assumptions that lead to the projections of attendance, operating revenues and expenses described in Chapter 5 of a Draft Final report.
- Reviewed the Draft Final report with the Steering Committee, which led to modifications in this Final report.

Bold, italics is used throughout to highlight key findings, conclusions and recommendations.

2. Contextual and Comparables Analyses

This chapter seeks to establish context for operational recommendations and assumptions and, in Chapter 5, attendance, operating revenue, and expense projections for the planned Estonian Canadian Museum and Archives (VEMU)

2.1 Contextual Analysis

It is important to establish a realistic definition of success for the Estonian Canadian Museum and Archives (VEMU) by considering the attendance, operational and financial benchmarks from similar museums and from the museums marketplace in general. The following table summarizes key data from museum surveys in Ontario, Canada and the United States. The Canadian data are from the 2015 Canadian Heritage Survey. The US figures are quite dated but represent the last comprehensive survey data from the American Alliance of Museums (AAM), and remain generally relevant. Although the Canadian figures are averages and the American are medians and not directly comparable, it is reasonable to draw general benchmarks and conclusions from them. In considering the data for Ontario the most relevant to VEMU are data for “medium” Ontario museums with operating budgets between \$100,000 and \$1 million.

- **Attendance Levels:** The average medium sized Ontario museum attracts close to 17,900 visitors annually compared to a Canadian average of about 20,500 and a US median of 26,500.
- **School Groups as a Percentage of Total Visitors:** Canadian museums reported that school groups comprise 7.6% of total visitors compared to 9.0% for medium sized museums in Ontario. The school group percentage is higher at 12.3% in the United States, largely reflecting strong curriculum links to African American history. However, as shown later in this chapter, most culturally specific museums do not attract substantial numbers of school visitors.
- **Admission Charges:** Data are available only for US museums and indicate that 41% of all US museums offer free admission. ***As shown later in this chapter, smaller culturally specific museums tend to offer free or by donation admissions.***
- **Members:** Most museums, even those offering free admission, have membership programs. Free admission museums often focus on upper level members in which support is based far more on love of the institution and its mission than it is on receiving value for money spent. ***This study has recommended only an upper level Friends membership program for the Estonian Canadian Museum and Archives (VEMU).***

- **Staff and Volunteer Levels:** Staffing levels for the average medium budget Ontario museum is of 3 full-time staff, 6 part-time and 3 contract workers supported by 66 volunteers. VEMU will need to control staffing levels and costs to be operationally sustainable and balance these against the need for an adequate professional staff. ***Opportunities for shared staff with Tartu College, the Estonian Studies Centre and the International Estonian Centre will be very helpful to encourage collaborations and to help control staffing costs.***
- **Total Operating Revenue:** The average operating budget for medium sized Ontario museums is about \$430,000, compared to the Canadian average of about \$730,000.
- **Sources of Operating Income:** The average figure for Canadian museums is 38% from earned¹ sources, with 33% earned for medium Ontario museums and 28% for U.S. museums. American museums generate far more income from private and endowment sources due to different tax treatment than their Canadian counterparts, which receive much more operating support from government sources. ***Culturally specific museums tend to require a high percentage of operating funds from within their own ethnocultural community.***
- **Staff Costs as a Percentage of Total Operating Costs:** Salaries, wages and benefits account for an average of 51% of the operating costs of medium Ontario museums and 46% for all Canadian museums.
- **Other Operating Costs:** Building occupancy costs are generally 10-15% of total operating costs. However, ***this study assumes that Tartu College will absorb utilities, repairs and maintenance and other occupancy costs for the Museum, which helps to enhance its operational viability.***

¹ Earned income generally includes admissions, retail, food, rentals, programs and lower level or all memberships.

| Realities of the Museums Marketplace | Small Ontario Museums | Medium Ontario Museums | Large Ontario Museums | All Ontario Museums | Canadian Museums | US Museums |
|--|-----------------------|------------------------|-----------------------|---------------------|------------------|---------------|
| Sample Size | 253 | 160 | 41 | 454 | 1,248 | 671 |
| On-Site Attendance | 4,063 | 17,869 | 206,535 | 27,213 | 20,519 | 26,500 |
| School Groups as % of Total | 7.4% | 9.0% | 6.6% | 7.2% | 7.6% | 12.3% |
| Members | 56 | 253 | 6864 | 740 | 444 | 795 |
| Total Full-Time Staff | 0 | 3 | 44 | 5 | 3 | 7 |
| Total Part-Time Staff | 1 | 6 | 37 | 6 | 6 | 5 |
| Total Contract Workers | 1 | 3 | 4 | 2 | 1 | N/A |
| Total Volunteers | 21 | 66 | 235 | 56 | 42 | 65 |
| Sources of Operating Revenues | | | | | | |
| Earned Income as % Total | 47.3% | 33.3% | 39.1% | 38.6% | 37.9% | 27.6% |
| Government Sources % | 27.1% | 45.9% | 45.8% | 45.4% | 49.0% | 24.4% |
| Private Donations % | 24.6% | 18.4% | 13.3% | 14.2% | 11.0% | 36.5% |
| Interest/Endowment % | 1.0% | 2.4% | 1.7% | 1.8% | 2.1% | 11.5% |
| Total Operating Revenue | \$45,838 | \$423,913 | \$11.5 million | \$1.2 million | \$729,953 | \$1.2 million |
| Sources of Operating Expenses | | | | | | |
| Staffing | 30.7% | 50.8% | 44.5% | 45.0% | 45.9% | 49.9% |
| Occupancy | 12.6% | 10.0% | 11.8% | 11.6% | 13.3% | N/A |
| Collections Care | N/A | N/A | N/A | N/A | N/A | 8.0% |
| Marketing | 3.9% | 3.3% | 3.8% | 3.7% | 3.6% | 4.1% |
| <i>Source: 2013 Canadian Heritage Survey (2015); 2013 Special Report on Museums & Art Galleries by Size and Province/Territory (2015); and 2009 Financial Survey of American Alliance of Museums</i> | | | | | | |
| <i>Note: *Museums categorized as small have annual revenue of under \$100,000; medium \$100,000 to \$999,999; large \$1 million+</i> | | | | | | |
| <i>Canadian figures represent averages and US figures medians</i> | | | | | | |

2.2 Benchmarks from U.S. Museums Focused on Immigrants from Baltic Countries

This section considers the experience of U.S. museums that are focused on immigrants from Baltic countries and the heritage connections to those countries. This helps to inform operational recommendations in the following chapter and provides benchmarks for projections of attendance, operating revenues and expenses in Chapter 5. The four museums researched for purposes of benchmarks and lessons for the Estonian Canadian Museum and Archives (VEMU) were selected on the basis of being in larger population centres comparable to Toronto: Chicago, Seattle, Minneapolis and Rockville Maryland, a suburb of Washington DC. These are discussed below.

2.2.1 Balzekas Museum of Lithuanian Culture, Chicago

The Balzekas Museum of Lithuanian culture was founded in 1966 by Stanley Balzekas, Jr., based on the family's collection of rare maps, armour, and art. The Museum "celebrates the notable achievements of Lithuanian Americans, the Lithuanian nation, and Lithuanian communities worldwide". It is the largest repository of Lithuanian cultural artifacts outside of Lithuania. Initially a small facility was established, which brought in donations and other acquisitions; this provided the impetus for the growth of collections and a subsequent expansion and relocation to a former hospital about 20 miles southwest of downtown Chicago. The site is accessible by public transportation and car and has free parking in its own lot.

The museum features historical and art galleries, a library, a children's museum, ballroom, theater, workshops, and offices to combine for 60,000 gross sq. ft. This is substantially larger than the 10,000 gross sq. ft. assumed for the Estonian Canadian Museum and Archives (VEMU).

On-site attendance is about 30,000, based on a \$9.00 admission charge for adults, \$7.00 for students and seniors, and \$3.00 for children 12 & under. There are also opportunities for visitors to attend for less or for free. ***Visitors to the exhibitions are primarily of Lithuanian descent or have Lithuanian connections. The exceptions are for programs that attract the wider community including Easter egg decorating, Christmas ornament and mask making.***

The Museum has approximately 3,000 active members within two different types of memberships. Basic membership includes free admission to the Museum, a regular newsletter, and discounts on programs, retail items, and translation services. Genealogy memberships include the privileges of basic membership plus discounted services related to genealogy services.

The Museum is open daily from 10am to 4pm. It is operated by a full-time staff of 7, supported by 5 part-time staff and 5 part-time volunteers. Total operating expenses for the Museum are about \$3 million per year, of which 43% are staffing costs. Operating revenues are primarily from private and endowment support (60%) mainly from Mr. Balzekas but also from other supporters largely within the Lithuanian community. About 10% is from various government grants with the remaining 30% from earned income, including rental of space in the building to private businesses. ***These data help to confirm that the bulk of the operating funds for VEMU will need to be from within the Estonian community.***

2.2.2 Latvian Museum, Rockville, Maryland

The mission of the Latvian Museum is the "preservation and communication of Latvian history and culture and the history of Latvians in the United States." There are currently five very small Latvian museums in the United States, all of which are within churches or community centers. The Latvian Museum in Rockville Maryland, a suburb of Washington DC, is considered the main one because it is in the office of the national headquarters of both the American Latvian Association and the Latvian Institute, and includes a Latvian Saturday school. All are inside the Latvian Lutheran Church.

None of the five Latvian Museums, including the one in Rockville, has its own paid staff and all are in danger of closing, as volunteer managers and staff retire and replacements cannot be found. This has already happened with the Latvian Museum in Three Rivers New Jersey. Since there is no space for its collections to be relocated to any of the other Latvian American Museums, the collections of the closing museum are being sent to the Latvian National Museum in Riga.

The Latvian Museum in Rockville has only 1,200 sq. ft. of total space, of which about 800 square feet is exhibition space. More of the exhibition space is devoted to Latvia than to the Latvian American experience. Visitors enter at a time-line exhibit that provides a brief overview of Latvian history from prehistoric times to the present. Exhibits related to Latvia include coins and paper money from the 1400s to the present; pre-WWII postage stamps; handwoven and embroidered textiles; diplomatic, military and civilian medals and insignia and souvenir pins from Latvian song festivals. Bronze, silver and amber jewelry is on display and photographs document life in displaced persons camps in postwar Germany as well as immigration to America.

Exhibits associated with the Latvian American experience include a large cooper-made storage barrel, a flax break and a spinning wheel from the late 1800s.

The Museum is open only by appointment and annual attendance is in the range of 500 to 1,000 per year, based on free admission. Attendance levels were generally in the range of 2,000 visitors per year in the past but have declined as the exhibits have not changed since 1980. There are plans to finally re-do the exhibits to include contemporary audio-visuals.

Visitors are primarily of Latvian descent, including Latvian tourists and Latvian Americans visiting friends and relatives in the region.

The volunteer manager is supported by other part-time volunteers. The operating budget has been in the range of only \$12,000 per year, which includes paying a modest rent to the Latvian Lutheran Church. All of the funds, with the exception of a marginal amount from a donation jar, are from the Latvian Association.

The volunteer manager of the Latvian Museum in Rockville commented that the idea of a single Estonian Canadian Museum and Archives (VEMU) with paid staff is far more effective than the five volunteer operated, very small Latvian American museums.

2.2.3 American Swedish Institute, Minneapolis

The American Swedish Institute (ASI) in Minneapolis Minnesota was founded in 1929 in the 1908 Turnblad Mansion. The mission of ASI is to be “a gathering place for all people to share experiences around themes of culture, migration, the environment and the arts, informed by enduring links to Sweden.” The Mansion building includes about 40,000 sq. ft. of space, of which about half is public space used for exhibitions, public and educational programming. The Wall Street Journal described ASI as “a model of how a small institution can draw visitors through exciting programming.”

The American Swedish Institute is closed on Mondays and operates from noon to 5 p.m. on Tuesdays, Thursdays and Sundays, from 10 a.m. to 5 p.m. on Saturdays and from noon to 8 p.m. on Wednesdays. Admission fees are \$10 for adults, \$7 for seniors, and \$5 for children 6-18 and for full-time students with ID. The membership structure at ASI is as follows: Full-time Student \$30; Individual & Non-Resident Household \$45; Dual \$60; Household \$65; Sustaining \$125; Patron \$250; Linnaeus \$500; Three Crowns \$1,000; and Life \$3,000.

In 2012 ASI opened a 34,000 sq. ft. addition, the “Carl and Leslie Nelson Cultural Center”. It added about 3,000 sq. ft. of exhibition space and is primarily a rentals/events space, with glass-enclosed reception area for the overall campus, gift shop and restaurant. Events include concerts, films, lectures, and community gatherings as well as youth and family programs and genealogy workshops. The Center can seat 300 for a lecture or concert or 200 for a seated dinner. Renovations were also completed to the Turnblad Mansion in 2012, which added a community hall, library, classrooms and a new elevator-stairway circulation tower.

ASI attracts about 50,000 visitors per year to exhibitions, of which only about 20% are believed to have Swedish linkages. Close to 2,000 visitors arrive in school groups, some of whom are already in the building taking Swedish language classes. The Director interviewed commented that even with a substantial history of Swedish immigration to Minnesota and neighboring states it is difficult to establish the curriculum links to attract more school groups.

Other rounded attendance benchmarks are the 38,400 diners at the FIKA cafe, 24,900 retail transactions at the ASI Museum Store, 20,500 guests for rental events, 8,500 programs participants, 8,100 festival attendees, 3,200 group tour participants, and 2,800 youth & family program participants.

ASI is operated by 26 full-time paid and 25 part-time paid staff, supported by 171 part-time volunteers. It has an operating budget of about \$3.7 million, of which 65% is from contributed sources and 35% from earned income. Most of the contributed income is from private supporters, as very little income is generated from government sources, while an endowment provides \$200,000 per year, or about 5% of total revenues. The primary sources of earned income are rentals/events and food service, followed by admissions, memberships and retail.

2.2.4 Nordic Museum, Seattle

The Nordic Museum in Seattle was founded in 1979. The Museum honours the legacy of immigrants from all five Nordic countries: Denmark, Finland, Iceland, Norway, and Sweden. The Nordic Museum “shares Nordic culture with people of all ages and backgrounds by exhibiting art and objects, preserving collections, providing educational and cultural experiences, and serving as a community gathering place”.

The museum was originally known as the “Nordic Heritage Museum” and a name change was implemented to “Nordic Museum” to emphasize that the Museum is not for only people of Nordic descent, and also to emphasize contemporary programming. Another name change is planned, to name the facility the “National Nordic Museum”.

The original Nordic Heritage Museum was established in a former elementary school building in a residential part of Ballard, a suburb of Seattle. After 10 years of planning, fundraising and construction, a new 59,000-square-foot building was opened in May of 2018 on NW Market Street, also in Ballard. The location is very close to the Crittenden Locks and Salmon Ladder, which attract one million free admission visitors per year. The new Museum features 31,000 sq. ft. of exhibit space, of which 27,000 sq. ft. is permanent exhibition space and 4,000 sq. ft. is temporary. The permanent exhibit was reconceived at the time of the new facility opening as “Nordic Journeys” with a timeline that spans four-thousand years featuring the Viking-era through to modern Nordic design. There is also a multipurpose room that can seat up to 290 for seated dinners and 450 in theatre seating. There are also meeting rooms and a 12,000-volume library of Nordic language books.

The capital cost for the new Museum was about \$52 million, including the facility, exhibitions and other project costs, or \$881 per square foot all in. About 15% of the capital funding was from government sources, with all but 5% of the 85% of private capital support from funders with Nordic connections.

A large part of the museum's focus is on offering programming to educate the public about Scandinavian culture, including a craft school, adult and kid's programs and teacher resources. The Nordic Museum holds two annual special events, Viking Days, and Julefest.

The Museum is open Tuesday through Sunday 10am to 5pm and until 8 pm on Thursdays. However, attendance on Thursday evenings has been lower than expected and opening times are being reconsidered. Admission charges are \$15 for adults, \$12 for seniors, \$10 for students and youth, and free for children four and younger.

In the previous facility attendance levels were in the range of 40,000 annual visitors. Opening year attendance in the new facility is likely to be in the range of 170,000, but is expected to level off to the 100,000 to 120,000 range in subsequent years. The Museum is able to tie into the grade 3 and 4 curriculum, which are peak grades for school field trips. At these grade levels there are units of study on US Immigration History and World Cultures. Accordingly, the Museum expects to attract about 17,000 children in school groups charged \$5.00 per pupil, or about 10% of total visitors in the opening year. Other regional residents are estimated to account for about 55% of all visitors, with tourists at 35%, many of whom are visiting the nearby Locks or Salmon Ladder. The fact that about 10% of the total population of the State of Washington still claims Nordic/Scandinavian descent helps to encourage resident and school group attendance². In contrast relatively few residents of Ontario are of Estonian descent, creating a more significant attendance challenge for the Estonian Canadian Museum and Archives (VEMU). Over 10% of visitors to the Nordic Museum arrive for facility rentals or meetings.

The Nordic Museum operates with 32 FTE staff, supported by volunteers. The total operating budget is about \$3.6 million, of which a very substantial 65% is expected to be earned income in the opening year. Like attendance, earned income is expected to decline substantially after the opening year, causing the Board to seek to increase the endowment to support operations from the current \$5 million to the \$10 million range.

² <https://medium.com/migration-issues/is-the-pacific-northwest-overwhelmingly-nordic-3b32878403a3>

Very little operating money is provided by government sources (\$50,000) with the large majority coming from private support, of which about 80% is from persons with Nordic heritage or connections.

2.3 Benchmarks from Small Culturally Specific Museums in Toronto

Two major, culturally specific museums and related institutions in Toronto are the Aga Khan Museum and the Japanese Canadian Cultural Center. Both are substantially larger than what is being planned for the Estonian Canadian Museum and Archives (VEMU). More relevant are the following two smaller museums associated with immigrants from eastern European countries:

- Lithuanian Museum – Archives of Canada, Mississauga
- Ukrainian Museum of Canada, Ontario Branch

2.3.1 Lithuanian Museum-Archives of Canada

The mission of the Lithuanian Museum-Archives is to “build a comprehensive resource for those of Lithuanian heritage in Canada, and for the Canadian community at large, and for all those with an interest in Lithuanian culture.” The Museum opened in 1989 to occupy a large room for exhibitions of about 3,900 square feet in the Anapilis Christian Community Centre in Mississauga. In addition there is archive, workroom and library space and a small office. It remains the only Lithuanian focused museum in Canada.

The site offers free parking but is an 11 minute walk from the nearest bus stop. Major capital funders of the Community Center were the Lithuanian Canadian Foundation and related credit unions. The Foundation is also the major funder of operating costs, which total only about \$45,000 per year to employ one part-time Manager who is supported by three regular volunteers. The other main operating cost is the \$1,000 per month in rent to the Community Centre, which covers utilities and repairs and maintenance costs.

Opening hours are limited to Tuesday through Thursdays from 10 a.m. to 4 p.m., and from 11:30 a.m. to 4 p.m. on Saturdays when exhibitions are in place. Saturday openings are generally for a period of one month, twice per year. Attendance levels during the exhibitions are generally in the range of 200 persons per month. Almost all visitors are of Lithuanian descent or have personal connections to someone of Lithuanian descent, and almost all from the Greater Toronto area, with some tourists from Lithuania accompanying the friends and relatives they are visiting. School groups are entirely from Lithuanian schools which offer classes on Saturdays.

Admission is free to all visitors but donations are encouraged.

Given issues of access to a relatively isolated site in Mississauga, the Museum has focused very much on its web site and has developed exhibitions that are shown at other venues. For example an exhibition of Lithuanian Folk Instruments is being shown in one large display case in the West Wing of the Ontario Legislative Building from mid-April through late July of 2019 along with displays from other ethnocultural communities in the

province, including from the Estonian Studies Centre. The closing reception of a frequently traveled exhibition called “Sharing Our Stories: The Baltic Diaspora at Home in Canada” was held at York University. VEMU will not face these site limitations on Bloor Street in Toronto.

The archives includes 63 different collections and are the primary focus of the institution for most of the year.

2.3.2 Ukrainian Museum of Canada Ontario Branch

The Ontario Branch of the Ukrainian Museum of Canada was established in 1944 by the Ukrainian Women’s Association of Canada, based at St. Volodymyr Ukrainian Orthodox Cathedral in Toronto. After 35 years at that location, the Museum moved to larger facilities within St. Vladimir Institute on Spadina Road in downtown Toronto, where it remains today. St. Vladimir’s includes a student residence, research institute, archives, and library and banquet opportunities, in addition to the Museum.

The existence of the Ukrainian Museum has enabled what began as a modest collection of artifacts that has grown to more than 5,000 artifacts, predominantly textiles that have been collected, researched, documented, photographed and preserved to professional museum standards by volunteers. However, the space available in St. Vladimir’s Institute is only 1,600 square feet, of which about 1,000 square feet is exhibition space. The Museum benefits from being in the building because it is a student residence, and is where various events take place. The Museum does not pay for utilities, repairs and maintenance and other occupancy costs and pays only a very nominal rent each year. On the other hand, being part of a larger building means that there is no independent heat and humidity control, which puts the collections at risk. VEMU, while connected to a larger building, has the advantage of separate climate control.

The Ukrainian Museum opens for five days per week, closing Saturday and Sunday in the cold weather months and Sunday and Monday in the warm weather months to attract people in the area on Saturdays. There are no evening hours. We have recommended five day openings, of which two have evening openings, for the Estonian Canadian Museum and Archives (VEMU), as discussed further in Chapter 4.

The Ukrainian Museum operates with only one part-time staff person, supported by numerous volunteers. The volunteers have developed at least one major thematic exhibit annually since 1980, many complemented by special programming for school groups and others. School groups attend from the four Ukrainian day schools in the Toronto area that are part of the Catholic school system, as well as from six Saturday schools. No visits take place from other public or Catholic schools, but it is an objective of the Museum to change this in the future in the context of an expansion, discussed further below. Total annual attendance, is about 1,500, of which 250 are from these school groups.

Of the 1,500 annual visitors about 85-90% have a direct relationship to the Ukrainian community. Others are walking on Spadina Avenue and wander in or are staying at nearby hotels. A location on Bloor Street and proximity to other members of the Bloor Street Culture Corridor should also help the Estonian Canadian Museum and Archives to widen attendance from beyond the Estonian community.

Admission to exhibitions is by suggested donation. The current major exhibition is called “Foundations of Faith: Ukrainian Orthodox Churches of the Eastern Eparchy of Canada.” Past exhibitions over the past decade include:

- Treasures Rediscovered & Shared (2018)
- Trunk Tales: Leaving home ... finding home (2017-2018)
- Ancient and Contemporary: Symbolic Forms of Ukrainian Tradition (2016-2017)
- For our Children (2016)
- Diverse yet United, Part 2 (2015)
- Diverse yet United, Part 1 (2014)
- Mamyna Sorochka (2014)
- The Art of Revolution (2014)
- Christ is Born (2011-2012)
- All that Matters ... The Art of Ivaan Kutulsky in Retrospect (2009)
- At Home With Heritage (2007-2008)

The exhibitions therefore very much reflect Ukrainian culture, history, art and religion. Associated with each exhibition, the Museum offers lectures and workshops on related topics to enhance the exhibition experience.

The annual operating budget of the Ukrainian Museum is only about \$130,000, of which \$5,600 is a provincial operating grant. The Museum reports several thousand dollars from earned income, mostly from retail sales at various events outside the Museum.

Most of the funds to support the Museum are from individual, family, foundation and corporate donations from within the Ukrainian Canadian community.

Future plans include a tripling of the space available to the Museum as part of a retrofit of St. Vladimir's Institute to include underground parking, renovation of student residences, enhanced banquet opportunities and other improvements.

2.4 Benchmarks from Site Neighbour - Bata Shoe Museum

The Bata Shoe Museum is located at 327 Bloor West, almost across the street and very close to Tartu College at 310 Bloor West, and therefore to the site of the future Estonian Canadian Museum (VEMU). The Bata Shoe Museum has no parking of its own and reports that the majority of its visitors arrive by public transportation. Green P and other parking in the area is limited and private parking is expensive. Proximity to hotels and other members of the Bloor Street Culture Corridor is a plus as it will be for VEMU.

Plans for developing a shoe museum were initiated in 1979, when Sonia Bata's private collection had outgrown its home. The Bata family established the Bata Shoe Museum Foundation, which funded fieldwork to collect and research footwear in communities where traditions were changing rapidly and to establish an international centre for footwear research. The result was the Bata Shoe Museum, which opened its doors in May of 1995. The building is about 40,000 square feet, of which about 16,000 sq. ft. is exhibition space.

The mission of the Bata Shoe Museum is “to communicate the central role of footwear in the shaping the social and cultural life of humanity. Through acquiring, conserving, researching, interpreting and exhibiting material evidence of the history of footwear and shoemaking, the museum illustrates the changing habits, lifestyles, culture and customs of the world’s inhabitants. The BSM’s international collection of over 13,000 artifacts spans 4,500 years of history.” The Bata Shoe Museum has the world’s largest and most comprehensive collection of shoes and footwear-related objects from virtually every culture in the world. The Museum is far more about social history than it is about fashion.

Attendance levels have been in the range of 100,000 visitors per year for the last few years. About one third of visitors are regional residents, and about two-thirds are tourists. About half of tourists are from elsewhere in Canada and half are international. The Bata Shoe Museum is open daily from 10 a.m. to 5 p.m. with the exception of remaining open until 8 p.m. on Thursdays and opening from noon to 5 p.m. on Sundays. Admission charges are as follows:

| | |
|---------------------|-------|
| Individual: | \$ 14 |
| Senior: | \$ 12 |
| Student (with ID): | \$ 8 |
| Children ages 5-17: | \$ 5 |
| Children under 0-4: | FREE |

School group charges are \$5.00 per pupil if self-guided and \$6.00 if guided. To encourage school group visits, the Bata Museum web site lists potential curriculum links at all grade levels. This will be important, to the extent practical, for the VEMU as well. Some 11,000 school group visitors attend each year. Peak grades are 1-2 as related to the science curriculum and to traditions and celebrations, and especially to Indigenous Studies in grades 3-5, as well as fashion in Grades 10-11. ***The best opportunity for crossover visits by school groups to the Estonian Canadian Museum and Archives appears to be in grades 3-5, which are peak grades for school visits, to allow for comparison of the indigenous and immigrant and refugee experiences on the same trip.***

Family discount packages are also offered and there is a Pay What You Can policy with a suggested donation of \$5.00 on Thursday evenings. The Pay What You Can evening is sponsored by a private company. The interest in Pay What You Can Thursday evenings has declined over the years and recently only about 100 people attend. When Thursday evenings were free the attendance levels were much higher.

The market skews about 65% female, with relatively few children attending despite family-focused initiatives such as offering all children under 13 loot bags.

The Bata Shoe Museum operates with 12 full-time, three contract and two part-time staff, supported by about 100 volunteers. The total operating budget is confidential because the Bata is a private museum, but it was disclosed that about 25% of operating revenues are earned, 15% government, 20% private and 40% from two endowments, one from the Bata family and the other from the Bata Company. The main sources of earned income are admissions, the retail store and facility rentals. The lobby and two multi-purpose rooms are the main spaces for evening rentals as there is no theatre or auditorium in the Museum. If the entire building is rented the capacity is 125 for seated dinners and twice that number for receptions.

Future plans include a shift to more contemporary shoe design, including sneakers, and other initiatives to widen appeal to younger people. The more successful the Bata Shoe Museum the greater the number of potential visitors who could combine a visit with the Estonian Canadian Museum.

The main advice offered to the Estonian Canadian Museum and Archives was to be realistic regarding attendance and revenues and seek to maximize visibility on Bloor Street.

2.5 Summary of Key Points from Contextual and Comparables Analyses

The data and interview feedback from other selected culturally specific museums set out in this chapter help to identify a number of key points to be considered for the Estonian Canadian Museum and Archives (VEMU):

- Some of the culturally specific museums compared are relatively large (Nordic Museum, Balzekas Museum of Lithuanian Culture, American Swedish Institute) while others are very small (Lithuanian and Ukrainian in Toronto area, and Latvian in the United States). The Estonian Canadian Museum and Archives (VEMU) is programmed at approximately 6,900 net sq. ft.³ (10,000 gross) and will include exhibition, archival, programming, office and other spaces. A common feature of the smaller museums is that they are connected to or within larger facilities such as community centres or churches. This helps to control staffing and other operating costs and is also a strength of VEMU, which will be connected to Tartu College and adjacent to the International Estonian Centre.
- Capital and operating funders of each culturally specific Baltic or Nordic Museum are primarily from within the ethnicity. This will be required for VEMU as well.
- The culturally specific museums reviewed attract primarily persons of that ethnicity or have connections to it to view the exhibitions. General interest programming opportunities are more likely to attract the general public.
- School groups for the smaller museums are also limited primarily to their ethnicity, so for example Saturday Lithuanian, Latvian and Ukrainian classes represent most school group visitors. The larger Nordic Museum encompasses five countries and has a larger population of Nordic descent than the number of Estonians available in southern Ontario. It is also able to tie into the curriculum at peak field trip grade levels 3 and 4 in which immigration and other cultures are studied in the State of Washington. The Bata Shoe Museum is able to attract a substantial number of school groups on the basis of the large indigenous collections it has. This suggests opportunities for the Estonian Canadian Museum and Archives (VEMU) to encourage visits by some school groups already at the Bata Museum on the basis of comparison of Indigenous and Immigrant and refugee experiences. Charged admission to the Bata Shoe Museum can also be contrasted with the free admission to be offered by VEMU.

³ Net square feet (nsf) is the usable space within a building, typically measured to the inside face of the interior walls of a room or area

- The smaller culturally specific museums do not charge admission and instead request donations. This is also recommended for the Estonian Canadian Museum and Archives (VEMU) except for a periodic major exhibition.
- Facility rentals and events are an important source of earned income for only the larger museums. The International Estonian Centre will be the primary rentals venue in the Estonian complex, not VEMU.
- Only the larger museums report having a membership program. We have recommended a Friends program (upper level memberships only) for the Estonian Canadian Museum.
- Staffing levels for the smaller museums tend to be limited as are operating budgets. Opportunities for shared staffing with Tartu College and potentially with the International Estonian Centre are very positive for the feasibility of the Museum.

3. Analysis of Existing and Potential Markets

This chapter focuses on potential resident, school and tourist markets for the Estonian Canadian Museum and Archives (VEMU). It begins with an overview of the markets for the existing programs of the Estonian Studies Centre.

3.1 Existing Markets/Revenues for Programs of Estonian Studies Centre

The existing Estonian Studies Centre is located within Tartu College in about 8,700 square feet of space, of which about half is temperature and humidity controlled (for the Archives). In addition, the ESC shares an additional 10,000 sf of space with the Estonian academic community. The Archives includes 15,000 catalogued books, 10,000 digitized photos, 1,500 videos, ex-patriot newspapers from 1944 onward, 110 personal and organizational archives, a 200 piece art collection and various ethnographic collections and refugee memorabilia among its personal artifacts.



Current operating programs offered by the Estonian Studies Centre include the Toronto Estonian Academic Choir (Õöbik), the Bibliography Club, the Estonian Memoir Writers Group, the Life Stories Group, the Book Club and the Lending Library. Events include lectures, film nights, musical concerts, and theatrical events, cooking shows, fundraisers and special exhibitions.

The following tables set out the attendance and revenue levels at a variety of programs, events and exhibitions offered by the existing Estonian Studies Centre and users of the space over the period from January 2016 through December 2018. The data indicate a substantial number of events and attendance despite limited facilities. The data also indicate a willingness by those in attendance to either pay or offer donations to pay for the costs associated with the events. The average figures for 2016-2018 serve to provide a base level for attendance and operating revenue projections set out in Chapter 5 of this report.

| ESC Event/Exhibition/Program Attendance by Category | | | | |
|--|--------------------------|-----------------------------|---|-----------------------|
| Year | Ticketed Visitors | By Donation Visitors | Free Visitors (Mainly Exhibitions) | Total Visitors |
| 2016 | 381 | 913 | 2,633 | 3,927 |
| 2017 | 309 | 647 | 2,198 | 3,154 |
| 2018 | 738 | 657 | 3,284 | 4,679 |
| Total 2016-18 | 1,428 | 2,217 | 8,115 | 11,760 |
| Average 2016-18 | 476 | 739 | 2,705 | 3,920 |
| % of Total 2016-18 | 12% | 19% | 69% | 100% |

| ESC Event/Exhibition/Program Revenues by Year and Average Per Year 2016-2018 | | | | | | | |
|---|--------------------------|--------------------------|----------------------------|-----------------------------|-----------------------------|----------------------------|-----------------------|
| Year | Ticketed Visitors | Ticketed Revenues | Revenue per Visitor | By Donation Visitors | By Donation Revenues | Revenue per Visitor | Total Revenues |
| 2016 | 381 | \$11,574 | \$30.38 | 913 | \$4,305 | \$4.72 | |
| 2017 | 309 | \$5,750 | \$18.61 | 647 | \$2,914 | \$4.50 | |
| 2018 | 738 | \$23,905 | \$32.39 | 657 | \$2,590 | \$3.94 | |
| Average 2016-18 | 476 | \$13,743 | \$27.13 | 739 | \$3,270 | \$4.39 | \$17,013 |

A survey of 61 visitors to cultural events or programs offered by the existing Estonian Studies Centre in 2015/16 helps to profile the respondents and indicates preferences and activity patterns. Among the findings of particular interest to this feasibility study are the following points:

- **Profile of respondents:** Approximately 64% are women and 64% are also aged 50 or older. All respondents were either Estonian or related to someone of Estonian descent.
- **Patterns of attendance at cultural events:** About 32% attend a cultural event at least once per month. About 27% attend alone and 65% attend with one or two friends or relatives. When asked about how often they support free events by making a voluntary donation, 41% said they do so always and 36% claimed they do so almost always. This is consistent with the revenues reported in the table above and is positive for the future Museum.
- **Information about cultural events at Tartu College:** The source of information for most was the Estonian Life newspaper (70%), followed by a friend or family member (51%), the Estonian Life webpage (42%), and the VEMU mailing list (41%).
- **Reasons for not attending additional cultural events at Tartu College:** The main reason is an inconvenient time (61%), followed by being unaware of the event (34%), and receiving the information too late (21%).

3.2 Potential Markets for Estonian Canadian Museum and Archives (VEMU)

This section focuses on potential resident, school and tourist markets for the Museum.

3.2.1 Resident Markets

The resident market is of primary importance for the following main reasons:

- Residents are readily accessible and available on a year-round basis.
- Residents can be made aware of the Museum and its exhibitions and programs more easily and more cost-effectively than tourists.
- Residents are most likely to be repeat visitors.
- Residents are more likely to become volunteers, members and donors.
- Residents often advise, and accompany, visiting friends and relatives to area attractions, including museums.

Population

The two following tables set out data for the City of Toronto compared to the regional Toronto Census Metropolitan Area (CMA), which adds the York, Durham and Peel regional municipalities. Both are compared to provincial and national population data and projections. The data indicate a very substantial and growing potential resident market for all museums. However, as shown in the following section, the Estonian Canadian resident population is quite small. ***The challenge will be to attract more than those within or connected to the Estonian community to attend given the relatively small number of Canadians of Estonian descent.***

| Resident Population | | | | |
|---|------------|------------|------------|-----------------------|
| | 2006 | 2011 | 2016 | % Change 2006-2016 |
| Toronto | 2,503,281 | 2,615,000 | 2,731,571 | 9% |
| Toronto CMA | 5,113,149 | 5,583,064 | 5,928,040 | 16% |
| Ontario | 12,160,282 | 12,851,821 | 13,448,494 | 11% |
| Canada | 31,612,897 | 33,476,688 | 35,151,728 | 11% |
| <i>Source: Statistics Canada, 2011, 2016 census</i> | | | | |

| Population Growth 2016-2041 | | | | | | | |
|---|-------------|-----------------|-----------------|-----------------|-----------------------------|-----------------------------|-----------------------------|
| | 2016 Actual | 2021 Projection | 2031 Projection | 2041 Projection | % Change from 2016/21 | % Change from 2016/31 | % Change from 2016/41 |
| Toronto | 2,731,571 | 3,030,913 | 3,354,449 | 3,639,293 | 11.0% | 22.8% | 33.2% |
| Toronto CMA | 5,928,040 | 7,253,522 | 8,345,880 | 9,403,062 | 22.4% | 40.8% | 58.6% |
| Ontario | 13,448,494 | 14,702,643 | 16,296,000 | 17,779,636 | 9.3% | 21.2% | 32.2% |
| Canada | 35,151,728 | 37,171,200 | 39,014,900 | 45,527,900 | 5.7% | 11.0% | 29.5% |
| <i>Source: Ministry of Finance of Ontario, 2018</i> | | | | | | | |

Ethnicity

The 2016 Canadian Census reports 24,530 Canadian residents of Estonian origin. Most (15,075, or nearly 62%) reside in Ontario and within Ontario the Toronto CMA includes 7,655 persons of Estonian ethnic origin of which there are 4,620 residing in the City of Toronto. This is a relatively small core market but one that tends to be very supportive of Estonian-related initiatives, as shown in the previous chapter.

Toronto is a very ethnically diverse city as seen in the following table. The data suggest that if attendance is to be maximized, the Estonian Canadian Museum and Archives (VEMU) should be perceived as a lens through which the Estonian Canadian story may be told that is reflective of the stories of other immigrant communities.

| Ethnic Origin (2016) | City of Toronto | % | Toronto CMA Total | % |
|--|-----------------|-----|-------------------|-----|
| Total - Ethnic origin* | 2,691,665 | | 5,862,855 | |
| North American Aboriginal origins | 35,630 | 1% | 73,875 | 1% |
| Other North American Origins | 345,705 | 13% | 786,975 | 13% |
| British Isles origins | 597,295 | 22% | 1,287,260 | 22% |
| French origins | 122,870 | 5% | 248,150 | 4% |
| Western European origins (except French origins) | 187,190 | 7% | 396,070 | 7% |
| Northern European origins (except British Isles origins) | 36,720 | 1% | 69,205 | 1% |
| Eastern European origins | 302,480 | 11% | 596,425 | 10% |
| Southern European origins | 441,480 | 16% | 988,415 | 17% |
| Other European origins | 42,130 | 2% | 72,270 | 1% |
| Caribbean origins | 165,735 | 6% | 346,530 | 6% |
| Latin; Central and South American origins | 113,815 | 4% | 213,985 | 4% |
| Central and West African origins | 31,135 | 1% | 58,830 | 1% |
| North African origins | 19,510 | 1% | 53,740 | 1% |
| Southern and East African origins | 56,405 | 2% | 80,285 | 1% |
| Other African origins | 41,950 | 2% | 77,575 | 1% |
| West Central Asian and Middle Eastern origins | 152,055 | 6% | 330,340 | 6% |
| South Asian origins | 350,040 | 13% | 10,180 | 0% |
| East and Southeast Asian origins | 586,510 | 22% | 995,125 | 17% |
| Other Asian origins | 4,605 | 0% | 1,134,050 | 19% |
| Oceania origins | 5,790 | 0% | 9,705 | 0% |

Source: 2016 National Household Survey

Note: * The sum of the ethnic groups in this table is greater than the total population estimate because a person may report more than one ethnic origin in the NHS.

Mother Tongue

One of the challenges of all ethnocultural groups in Canada is to encourage next generations to maintain their language in a country dominated by English and French. In the Toronto CMA in 2016 there were 2,685 persons who reported Estonian as their mother tongue. In the City of Toronto, although there are 4,620 people of Estonian ethnic origin in Toronto, only 1,985 of them know the Estonian language. Over the period from 2011 to 2016 the number of Canadians listing Estonian as their mother tongue declined by 940 people. In Toronto the decline was to 460. ***The new Estonian Canadian Museum and Archives (VEMU) can help to encourage more persons of Estonian descent to encourage their children to maintain the Estonian language.***

Age

The following table compares age profiles and indicate a younger median age for the City of Toronto and the Toronto CMA relative to provincial and national averages. Although there is a need for VEMU to appeal to all ages, it is particularly important to have an additional focus on children and seniors. That is, an objective of Estonian continuity and identity in Canada requires getting children interested in their history, culture and language.

The particular importance of seniors in the next two decades is that this is a large and growing part of the population as the baby boom generation is now into its retirement years, is living longer and is more active.

| Age of Population, 2016 | Toronto | | Toronto CMA | | Ontario | | Canada | |
|--|-----------|------|-------------|------|------------|------|------------|------|
| | # | % | # | % | # | % | # | % |
| 0-9 years | 271,025 | 10% | 648,390 | 11% | 1,453,445 | 11% | 3,916,920 | 11% |
| 10-19 years | 272,630 | 10% | 703,745 | 12% | 1,566,200 | 12% | 3,948,805 | 11% |
| 20-29 years | 427,695 | 16% | 836,290 | 14% | 1,768,740 | 13% | 4,528,680 | 13% |
| 30-39 years | 420,890 | 15% | 826,020 | 14% | 1,707,250 | 13% | 4,617,760 | 13% |
| 40-49 years | 373,315 | 14% | 854,635 | 14% | 1,809,260 | 13% | 4,615,100 | 13% |
| 50-59 years | 385,210 | 14% | 867,640 | 15% | 2,045,805 | 15% | 5,298,315 | 15% |
| 60-69 years | 284,405 | 10% | 613,650 | 10% | 1,583,890 | 12% | 4,262,990 | 12% |
| 70-79 years | 169,760 | 6% | 349,415 | 6% | 921,655 | 7% | 2,442,725 | 7% |
| 80 years and older | 126,635 | 5% | 228,250 | 4% | 592,260 | 4% | 1,520,430 | 4% |
| Median Age | 39.3 | | 38.8 | | 40.7 | | 40.7 | |
| | 2,731,565 | 100% | 5,928,035 | 100% | 13,448,505 | 100% | 35,151,725 | 100% |
| Source: Statistics Canada, 2016 Census | | | | | | | | |

Gender

Women account for a slightly larger percentage of the population and are generally a more important market for culture than are men. In addition to generally being more interested in culture, the main reasons are as follows:

- Women tend to make the decisions in a household regarding educational experiences for their children. Therefore, the greater the perceived educational benefits of cultural opportunities, the more likely they will be selected.

- Women account for a large majority of teachers, who usually make the decisions regarding school field-trip destinations.
- Women tend to make the decisions regarding attractions to visit while on family vacations and account for a majority of tour group passengers and trip planners.

In general, women account for 55-65% of the market for most museum types and this is likely to also be the case for the new Estonian Canadian Museum and Archives (VEMU). Of particular importance to women are issues of personal safety. Access from parking and public transportation and the perceived safety of the area are both important factors to potential attendance by women and those they influence. In the case of the site at 310 Bloor West access by public transportation is excellent and there are no real concerns about personal safety associated with it. The limited availability of parking is a weakness.

Educational Attainment and Income

Level of educational attainment is the variable with the closest correlation to museum and other cultural attendance and participation, as supported by numerous studies. The higher the level of educational attainment the more likely that a person will attend or participate. Like education, income is also an important indicator of potential cultural attendance, but is not as significant an indicator as education. That is, high-education, low-income persons are more likely to attend than are persons of high income and low education.

The table below indicates that the percentage of City and Toronto CMA residents that are university educated substantially exceeds provincial and national averages. This is positive for attendance at all museums, including VEMU.

| Resident Educational Attainment 2016 | | | | |
|---|---------|-------------|---------|--------|
| Educational Attainment | Toronto | Toronto CMA | Ontario | Canada |
| Less than high school | 10% | 10% | 10% | 11% |
| High school | 20% | 22% | 24% | 24% |
| Trade certificate | 4% | 4% | 6% | 11% |
| College diploma or some university | 21% | 23% | 27% | 25% |
| University diploma or degree | 44% | 41% | 32% | 29% |
| Total Pop (25 to 64 yrs) | 100% | 100% | 100% | 100% |
| <i>Source: Statistics Canada, National Household Survey 2016 total population 25+</i> | | | | |

Income is an important indicator of potential attendance too. The table below indicates a lower median family income for the City of Toronto relative to the CMA, province and national averages. This suggests the need to consider the impact on attendance of admission charges, particularly given the challenge of attracting visitors to a culturally specific museum, and helps to lead to the recommendations on admission charges in the following chapter.

| Income | Toronto | Toronto CMA | Ontario | Canada |
|---|----------|-------------|----------|----------|
| Median Family Income- all census families, 2015 | \$82,859 | \$94,132 | \$91,089 | \$88,306 |
| Median Family Income- all census families, 2010 | \$72,890 | \$84,199 | \$80,987 | \$76,511 |
| % Increase | 13.7% | 11.8% | 12.5% | 15.4% |
| <i>Source: Statistics Canada: 2016 Census</i> | | | | |

3.2.2 School Markets

It will be important for the Estonian Canadian Museum and Archives (VEMU) to focus on the school market for the following main reasons:

- Education is part of the mission and mandate of all museums that seek opportunities to broaden and deepen participation from school groups.
- Children brought to museums as part of school field trips often convince their parents to take them again.
- For children in lower income/education families, attending on a field trip is often the only opportunity to attend.

Key considerations associated with potential school group visits are enrollment levels, particularly at the Toronto Estonian School, as well as curriculum links, field trip policies and costs for the wider school community. The proximity of the site to the University of Toronto also allows the university market to be considered.

Enrollment

The table below indicates enrollment and growth levels for students in the Toronto Public and Catholic District School Boards as well as school boards in York, Peel and Dufferin regions. The data indicate a large and growing enrollment, particularly in the regional municipalities around Toronto.

| School Board | 2011/12 | 2012/13 | 2013/14 | 2014/15 | 2015/16 | 2016/17 | % of Provincial Total | % Change 2011/12 to 2016/17 |
|--|------------------|------------------|------------------|------------------|------------------|------------------|-----------------------|-----------------------------|
| Toronto DSB | 237,368 | 234,430 | 231,529 | 246,012 | 244,453 | 245,511 | 12.5% | 3.4% |
| Toronto Catholic DSB | 85,831 | 85,195 | 85,124 | 90,534 | 90,442 | 91,257 | 4.6% | 6.3% |
| York Region DSB | 111,251 | 111,827 | 112,841 | 120,727 | 122,972 | 123,842 | 6.1% | 11.3% |
| York Region Catholic DSB | 52,532 | 52,218 | 52,089 | 55,299 | 55,062 | 54,826 | 2.8% | 4.4% |
| Peel DSB | 142,596 | 143,015 | 143,804 | 154,990 | 153,776 | 155,573 | 7.9% | 9.1% |
| Dufferin-Peel Catholic DSB | 80,491 | 79,713 | 79,337 | 81,751 | 81,769 | 81,190 | 4.1% | 0.9% |
| Durham DSB | 64,901 | 64,874 | 65,001 | 67,991 | 69,468 | 69,861 | 3.4% | 7.6% |
| Durham Catholic DSB | 21,460 | 21,122 | 20,793 | 21,727 | 21,351 | 21,284 | 1.1% | -0.8% |
| Regional Total | 796,430 | 792,394 | 790,518 | 839,031 | 839,293 | 843,344 | 42.6% | 5.9% |
| Total Provincial Enrolment | 1,878,520 | 1,864,585 | 1,854,679 | 1,970,880 | 1,993,432 | 2,006,701 | 100.0% | 6.8% |
| <i>Source: Ministry of Education, 2018</i> | | | | | | | | |

Enrollment in the **Toronto Estonian School** is currently 66 children who attend on Tuesday evenings from 7 to 9 p.m. at the current location in Estonian House. Enrollment has been steady for the past five years but is lower than levels of 30 years ago when classes were held two evenings per week. Estonian House is also used on Saturday mornings for parent and toddler classes and kindergarten classes (age 3-6) with an enrollment of about 70. During Saturday mornings there are also classes for about sixty 7-17 year olds – Toronto Estonian Girl Guides and Boy Scouts. And there is an adult program with about 10 persons.

The closing of Estonian House means that these classes will now be held at the new International Estonian Centre, and therefore most likely to visit the Estonian Canadian Museum and Archives (VEMU).

Curriculum Links

There are no direct curriculum links to Estonian history or culture in any of the public or Catholic school districts. The most likely curriculum attendance will be to attend units of study on the immigrant experience in Grades 7 and 8. However, the focus on immigration in Grades 7 and 8 is on earlier periods and not after World War Two, when the largest Estonian immigration to Canada took place.

There are three organizations that are collaborating to seek to have the history of Canadians from Baltic countries and Eastern Europe included in the history curriculum in Ontario. The concept is that these histories are a lens through which the wider immigrant and refugee experience might be viewed. The Estonian Canadian diaspora would be part of the story. Although a very positive objective, its implementation is not one that this study assumes in the short term.

The Bata Shoe Museum is almost across the street from VEMU. It has been very successful in attracting school groups, in large part because of linkages to Indigenous/First Nations social history. ***The 11,000 annual students in school groups who attend the Bata Shoe Museum create opportunities for combined visits in which the emphasis could be to compare and contrast the aboriginal and immigrant and refugee experiences.***

Of course, the **Toronto Estonian School** offers a direct curriculum link to the Estonian Canadian Museum and Archives (VEMU). The School focuses on language, history and culture, including singing and dancing. Students are divided into classes held on Tuesday evenings based on age and knowledge of the Estonian language. An interview with the Principal of the Toronto Estonian School confirmed that the Museum would be a valuable resource for the students and a very convenient field trip destination.

Field Trip Policies and Cost

Funding for school field trips is limited and there is a tendency for schools to select field trip destinations offering strong curriculum links, especially to science and history. With the exception of the Nordic Museum it has been difficult for other culturally specific museums to attract school groups from the public schools even in offering free admission.

While admission charges are an issue in field trip selection a bigger impediment is the cost of bus transportation. As a consequence there are fewer field trips than in the past. Easy access to VEMU by subway is very positive, particularly for schools with good access to public transportation and for older children.

University Market

The University of Toronto is located very close to the site of the Estonian Canadian Museum and Archives (VEMU) and is the only University in Canada with an endowed Chair of Estonian Studies. The endowment was initiated in the 1980s with funding from the Estonian community and Tartu College and is funded in perpetuity by the University of Toronto. There was a small Estonian Studies program at the University but it is currently under suspension and is under review. The Chair of Estonian Studies now focuses on teaching Baltic history courses that attract about 30 students per year as a third year history course. Surprisingly, none of the current students in the course are of Baltic descent. There are also Estonian language courses at the University of Toronto that attract about six to eight students annually, some of whom have connections to Estonians.

The data indicate that from the perspective of market segments available to visit VEMU the university market is not likely to be significant.

3.2.3 Tourist Markets

Although not likely to represent a substantial market, tourists may be attracted to the Estonian Canadian Museum and Archives (VEMU) on the basis of its excellent location and proximity to the Bata Shoe Museum. VEMU is also likely to attract tourists from Estonia or those of Estonian descent who are visiting friends and relatives in the city. Survey data from the Ontario Ministry of Tourism, Culture and Sport for the Greater Toronto area (Tourism Region 5) includes the following key points of interest to this project:

- **Overnight, day trip, and total visitors and their origin:** The table below indicates some 9.59 million total visitors to the greater Toronto region in 2016, of which close to 92% were Canadian, primarily from within Ontario, and 8% international, including U.S. and overseas visitors. This reflects a very large number of day trip (17.4 million) person visits relative to 9.6 million overnight person-visits. Among overnight visitors approximately 79% were domestic and 21% international. Among day trip visitors, 99% were domestic. The data indicate a large potential tourist market but the key issue is not the size of the potential market but their potential interest in attending VEMU, given considerable competition for things to do. Opportunities are discussed below.

| Volume of Tourist Visitation (2016 Person Visits) | Overnight | Number Day Trip | Total | Overnight | Percentage Day Trip | Total |
|--|------------------|--------------------|-------------------|---------------|------------------------|---------------|
| Canadian | 7,553,500 | 17,223,200 | 24,785,600 | 78.7% | 99.0% | 91.8% |
| International | 2,038,400 | 180,900 | 2,219,300 | 21.3% | 1.0% | 8.2% |
| Total Visitors | 9,591,900 | 17,404,000 | 26,995,900 | 100.0% | 100.0% | 100.0% |

Source: Regional Tourism Profile 05; Ontario Ministry of Tourism, Culture and Sport 2016

- **Purpose of visits:** The data in the following table confirm the importance of attracting residents because 48% of tourists report their primary purpose is to visit friends and relatives (VFR). It is the primary motivation to visit Toronto for both domestic and international tourists. The challenge for VEMU is that there is a relatively small number of ethnic Estonians in the Toronto area. Approximately 28% of person visits are by pleasure travellers who are far more likely to attend museums than the 14% in Toronto on business.

| Main Purpose of Trip (Person Visits) | Canadian | International | Total | Canadian | International | Total |
|--------------------------------------|-------------------|------------------|-------------------|---------------|---------------|---------------|
| Pleasure | 6,666,000 | 783,000 | 7,449,000 | 26.9% | 35.3% | 27.6% |
| Visiting Friends and Relatives (VFR) | 12,139,700 | 908,800 | 13,048,500 | 49.0% | 40.9% | 48.3% |
| Shopping | 902,500 | N/A | 902,500 | 3.6% | N/A | 3.3% |
| Conventions (Personal) | 366,200 | N/A | 366,200 | 1.5% | N/A | 1.4% |
| Business | 3,511,700 | 313,800 | 3,825,400 | 14.2% | 14.1% | 14.2% |
| Other Personal | 1,190,700 | 213,700 | 1,404,400 | 4.8% | 9.6% | 5.2% |
| Total | 24,776,800 | 2,219,300 | 26,996,000 | 100.0% | 100.0% | 100.0% |

Source: Regional Tourism Profile 05; Ontario Ministry of Tourism, Culture and Sport, 2016

- **Seasonality of tourism:** The table below indicates that pleasure travel peaks during the third quarter (summer months) whereas visiting friends and relatives, business and other motivations are spread more evenly throughout the year.

| Quarter Trip Started (Person Visits) | Pleasure | VFR | Shopping | Conventions | Business | Other |
|--------------------------------------|----------|-----|----------|-------------|----------|-------|
| Q1 (Jan - Mar) | 27% | 51% | 2% | 1% | 14% | 5% |
| Q2 (Apr - Jun) | 27% | 47% | 4% | 1% | 15% | 6% |
| Q3 (Jul - Sep) | 36% | 42% | 3% | 1% | 11% | 6% |
| Q4 (Oct - Dec) | 20% | 54% | 4% | 2% | 16% | 4% |

Source: Regional Tourism Profile 05; Ontario Ministry of Tourism, Culture and Sport, 2016

- **Length of stay:** Among overnight visitors the average length of stay in Toronto was about 4.5 nights. International visitors stay significantly longer than Canadian visitors. The greater the length of stay the more time that visitors have available to attend museums.
- **Accommodations used:** A slightly higher percentage of visitors to Toronto stay in private homes, usually with friends or relatives they are visiting, than stay in commercial roofed accommodation. The data confirm the importance of encouraging residents to attend, accompanied by their visitors. In addition, a location along Bloor Street is within walking distance of several hotels and is accessible by subway for other tourists.
- **Party size and children in visitor party:** The average party size among visitors to Toronto is 2.3 as only about 11% of tourists bring children
- **Activities of visitors to Toronto:** The table below indicates that 4.2% of tourists attended any museum or art gallery. International tourists were more likely to do so (7.0%) compared to 2.6% of Canadians. The Estonian Canadian Museum and Archives (VEMU) will add to the cultural and tourism infrastructure of Toronto.

| Activities Participated (Person Visits) | Canadian | International | Total | Canadian | International | Total |
|---|-------------------|-------------------|-------------------|-------------|---------------|-------------|
| Festivals/Fairs | 328,900 | 401,200 | 730,100 | 1.5% | 3.3% | 2.1% |
| Cultural Performances | 1,095,000 | 298,100 | 1,393,100 | 5.0% | 2.5% | 4.1% |
| Museums/Art Galleries | 571,400 | 840,400 | 1,411,800 | 2.6% | 7.0% | 4.2% |
| Zoos/Aquariums/Botanical Gardens | 637,300 | 532,400 | 1,169,700 | 2.9% | 4.4% | 3.4% |
| Sports Events | 1,641,700 | 224,800 | 1,866,500 | 7.5% | 1.9% | 5.5% |
| Casinos | 168,700 | 177,000 | 345,700 | 0.8% | 1.5% | 1.0% |
| Theme Parks | 338,100 | 140,700 | 478,800 | 1.5% | 1.2% | 1.4% |
| National/Provincial Nature Parks | 264,300 | 622,600 | 886,900 | 1.2% | 5.2% | 2.6% |
| Historic Sites | 291,700 | 1,288,900 | 1,580,600 | 1.3% | 10.7% | 4.7% |
| Sightseeing | 784,800 | 1,656,100 | 2,440,900 | 3.6% | 13.8% | 7.2% |
| Indigenous | 22,600 | 20,400 | 43,000 | 0.1% | 0.2% | 0.1% |
| Visit Friends or Relatives | 8,719,800 | 1,282,100 | 10,001,900 | 39.7% | 10.7% | 29.4% |
| Shopping | 1,952,400 | 1,700,500 | 3,652,900 | 8.9% | 14.2% | 10.8% |
| Movies | 234,000 | 135,400 | 369,400 | 1.1% | 1.1% | 1.1% |
| Restaurant or bar | 1,530,400 | 1,878,700 | 3,409,100 | 7.0% | 15.7% | 10.0% |
| Medical/Dental appointment | 545,100 | 17,100 | 562,200 | 2.5% | 0.1% | 1.7% |
| Business Meeting/Conference/Seminar | 1,339,300 | 282,500 | 1,621,800 | 6.1% | 2.4% | 4.8% |
| Any Outdoor/Sports Activity | 1,505,600 | 503,200 | 2,008,800 | 6.9% | 4.2% | 5.9% |
| Total | 21,971,100 | 12,002,100 | 33,973,200 | 100% | 100% | 100% |

Source: Regional Tourism Profile 05; Ontario Ministry of Tourism, Culture and Sport, 2016

4. Recommendations/ Assumptions

The projections of attendance, operating revenues and expenses for the Estonian Canadian Museum and Archives (VEMU) in the next chapter of this report are based on benchmarks from the contextual, comparable and market analyses in the previous chapters and also on the recommendations and assumptions here. Some assumptions are directed by the client while others are consultant recommendations that have required client approval or modification before they were finalized as assumptions.

The recommendations/assumptions are set out in the following categories:

- Site and External Environment
- Spaces and Facilities
- Implementation Schedule, Capital Investment and Capital Funding Sources
- Mission Statement
- Visitor Experience and Collections
- Governance, Organizational Structure and Staffing
- Operations and Revenue Generation
- Marketing and Communications
- Other Assumptions

4.1 Site and External Environment

The site for the Estonian Canadian Museum and Archives (VEMU) will be at 310 Bloor West at Madison Avenue, connected to Tartu College and adjacent to the planned International Estonian Centre. This area will be, in essence, an Estonian cultural and educational hub.

Some of the strengths and weaknesses of the site that will affect projections of attendance, operating revenues and expense are as follows:

Strengths:

The excellent site benefits from Bloor Street pedestrian traffic and visibility and close proximity to:

- **Tartu College:** The Museum will be physically connected to Tartu College, which is an Estonian funded student residence, including both Estonian and non-Estonian students. Tartu College has a proven track record, with close to 50 years of successful operation. The most important strength is that the physical connection of the Museum to Tartu College will enable the College to absorb utilities and repair and maintenance costs and allow Tartu College staff to allocate time to help operate the Museum. This will help to limit operating costs and is discussed further below.
- **International Estonian Centre:** The Centre will seek to celebrate the achievements of Estonians in Canada and North America. It will be a place for performances, community and private events and will provide leasable space for innovative start-ups and office space for the Estonian community. The building will have four floors. In addition to the lobby entrance, the ground floor will include a café, credit union, potentially an Estonian trade office, and an accelerator for digital start-ups. The second floor features leased space to the Estonian Foundation of Canada as well as a main hall to host public or private events and performances and a catering kitchen. The third floor includes classrooms, a music room, study lounge and meeting space. The lower or basement level will feature a community room, sauna and change room. A rooftop terrace is also planned. ***The International Estonian Centre is scheduled to open in 2021. It will not be a museum or archives and will therefore complement and not compete with the Estonian Canadian Museum and Archives (VEMU).***
- **Bata Shoe Museum:** Proximity will increase the likelihood of visits by some of the 100,000 persons reported to attend the Bata Shoe Museum each year, especially school group visitors.
- **Subway System:** The site is a quick walk from the Spadina subway station and reasonably close to the St. George subway station.
- **The University of Toronto and the University of Toronto Schools (high school):** This creates opportunities for visits from students, staff and faculty, including the Elmar Tampõld Chair of Estonian Studies. Parents or others visiting the University or High School may also find it convenient to visit the Museum.
- **Nearby Condominiums and Apartments:** There are already condominiums and apartments within walking distance of the site. Two additional condominiums are planned that would increase the neighbourhood market for VEMU. These include a 29-storey condominium behind the UTS high school across the street and another planned on the site next door at the Bloor Street United Church. This provides a built-in market and easy accessibility for potential volunteers, some of whom might select the condominium because of its proximity to the Museum and Archives.

- **Bloor Street Culture Corridor:** This is a 5-year old consortium of organizations that offer cultural programming within two blocks of Bloor Street from Bathurst to Bay Streets. It includes museums like the Royal Ontario Museum and the Gardiner Museum, film and performing arts organizations and culturally specific organizations such as the Japan Foundation, Native Canadian Centre, Alliance Française, Istituto Italiano, Miles Nadal Jewish Community Centre, and the Estonian Studies Centre. In total there are 20 organizations in the consortium. Its objectives relate to audience development, destination marketing, advocacy and programming collaborations. Collaborative initiatives include a web site, brochures, street banners, and participation in festivals and events such as Open Streets Toronto. The consortium is expanding both in the number of members and in collaborative initiatives, all of which are positive for VEMU.

In addition, the building foundation is already in place for the Estonian Canadian Museum and Archives (VEMU), which helps to limit capital expenditures.

Weaknesses include:

- **Size:** A 6,900 net square foot space is relatively small. It includes approximately 2,000 net square feet (nsf) of dedicated exhibition space and another 1,800 nsf of multi-function (programming, events and temporary exhibition) areas. The relatively small space will help to control capital and operating costs but will also limit attendance and the ability to charge admission. We are not recommending a larger space, particularly given implementation of the adjacent International Estonian Centre, but the size of the exhibition and programming space must be considered a weakness from an attendance and revenue perspective. This building size also limits the amount of new collection storage that can be accommodated on site and as such, must rely on sub-standard space in Tartu College for the majority of its collection storage needs.
- **Parking:** There is no additional on-site parking possible and there will be competition for nearby parking from the International Estonian Centre and other future uses.
- **Vibration from Subway:** Mitigation of vibration has already been considered in the capital cost estimates for the Museum but nonetheless must be considered a weakness.
- **Limited Bloor Street Frontage of Museum:** This will limit potential awareness levels, particularly among those who had not made the Estonian Canadian Museum and Archives (VEMU) a pre-planned destination. However, this may be mitigated by signage and banners.
- **Existing Tartu College:** While the Estonian Canadian Museum and Archives benefits from proximity to Tartu College, direct access is limited given existing building design and floor levels. Additionally, the current condition of the collection loading and storage areas in the lower levels of Tartu College, and access to these spaces, is not optimal and does not meet current best-practice conditions. Moreover, Tartu College itself is aging and requires reinvestment.

- **City Infrastructure:** Buried wires could have capital cost implications for the development of the Museum.

4.2 Spaces and Facilities

This section sets out the recommended/assumed program of spaces required to achieve the vision and functional needs for the Estonian Canadian Museum and Archives (VEMU). A series of correspondences with architect Alar Kongats and a joint assumptions-programming workshop have led to a number of mutually-agreed upon assumptions regarding the space assignment and design. This section reflects these decisions and provides additional supporting information to help the client / architect with future design and operational decisions. It includes:

- **Facility Planning Assumptions**, a summary of the basic assumptions that have influenced the zoned space program recommendations. The zoned space program is a detailed list of spaces that identifies the rooms and their recommended or assumed sizes.
- **Functional Area Narratives**, a high-level description of the required function of each major space within the space program.
- **Planning Principles and Design Criteria**, a summary of key planning and design principles that the architect may reference during the subsequent design stages. This is set out in Appendix B to this report.

4.2.1 Facility Planning Assumptions

This section describes the facility-specific assumptions that have informed the recommended/assumed space program.

- This study focuses entirely on the new Estonian Canadian Museum and Archives (VEMU) and does not include any proposed renovations or modifications to the existing Tartu College or any recommendations for the planned international Estonian Centre.
- The space and facilities program is based on the identification of 1) net square footage requirements – the usable space required for museum functions or activities and 2) a gross square footage calculation based on a multiplier of the net square footage. Gross area typically accounts for thickness of walls, mechanical/electrical service areas, restrooms, and both horizontal and vertical circulation space. The proportion of net to gross area is typically 1.4 to 1.6 depending on design. This project assumes a 1.45 net to gross ratio.
- ***The Museum will offer approximately 6,900 net square feet (640 net sq. metres) of usable space. Assuming a net to gross factor of 1.45, this results in a total building size of approximately 10,000 gross square feet (928 sq. metres). However, it must be emphasized that the Museum will also have access to the existing 8,700 sq. ft. of archival space of the Estonian Studies Centre. There is also 10,000 sq. ft. of shared space on the ground floor of Tartu College.***

- It is also important to note that the assumed program exceeds the currently permitted maximum density on the site by close to 2,000 gross square feet. This will require the project to go through a Committee of Adjustment process.
- The Museum is assumed to have 2,000 nsf of exhibition space plus another 1,800 nsf of multi-purpose exhibit, programming and other space as well as archive (library) storage, and limited administrative spaces.
- Existing storage will remain in Tartu College. No off-site storage is assumed.
- Ramp access to the underground parking is fixed and cannot be relocated.
- Given that Tartu College currently houses the exhibit processing areas, no new collection handling care program (enclosed bay/dock, shipping/receiving, crating/uncrating space) form part of this program. However, it is noted that an isolation and small transit (temporary) storage room is provided in the Museum program as this was a stated need expressed in the assumptions/programming workshop.
- It is assumed that all formal “exhibit and archive” spaces will meet minimum standards for museum environments. In this case, this assumption is an ASHRAE “Class A” standard, requiring a minimum of 70° F +/-4° F and 50% RH +/- 5%. Non collections spaces can be conditioned to human comfort levels.
- The program does not include dedicated café space, which is assumed to be available in the International Estonian Centre and in Tartu College.

The Estonian Canadian Museum and Archives (VEMU) should also adhere, where possible, to the applicable City of Toronto, (Tier Two) Green Standards for sustainability, which may also include a green roof requirement. For reference, the City's goal with the Standard is to:

- “Improve air quality and reduce the urban heat island effect
- Reduce energy use and greenhouse gas emissions from new buildings while making buildings more resilient to power disruptions, and encourage the use of renewable and district energy
- Reduce storm water runoff and potable water consumption while improving the quality of storm water draining to Lake Ontario
- Protect and enhance ecological functions, integrate landscapes and habitats and decrease building-related bird collisions and mortalities
- Divert construction waste from going to landfill sites.”

Also, the adherence to this Standard, combined with 3rd party commissioning, would allow VEMU to potentially have the project's City development charges reduced.

Design teams should become familiar with any additional details and standards during the design stage to ensure project compliance.

4.2.2 Universal Accessibility

A main objective of the Estonian Canadian Museum and Archives (VEMU) should be to have all-inclusive accessibility to a wide range of people with different cultural, social, educational, economic, and national backgrounds, interests, and capabilities. Citing the Canadian Cultural Spaces Fund, VEMU should demonstrate a commitment to providing “increased and improved access for Canadians to arts and culture” to the greatest extent possible, without the need for adaptation or specialized design. The principle of Universal Design extends this by integrating the philosophy and conceptual framework of universal accessibility into a creative, functional, and aesthetic solution that allows an equal experience for all patrons of cultural facilities. As a goal, it is recommended that VEMU not only meet the minimum standards for universal accessibility but should seek to eliminate discrimination based on disabilities, with a particular focus on physical barriers.

4.2.3 Space Program

The following space program is based on the identification of net square footage requirements for the Estonian Canadian Museum and Archives (VEMU), as these reflect the usable space required for functions or activities. The allocated area associated with each space is provided as net square feet (nsf) - the usable space within a building, typically measured to the inside face of the interior walls of a room or area.

A separate notation for each specific museum zone is also provided. Collections-focused museum spaces can typically be organized according to a classification of four zones, which classifies the area in terms of public and non-public functions and collections and non-collections functions. The four museum zones are based on whether or not the space accommodates collections, and whether or not the space is normally open to the public. The four zones are:

- **Zone A, Public Non-Collections:** In this zone, visitors are present, collections items typically are not present. Lobby, gift shop, restrooms, event space, food service spaces, and public program areas are the types of spaces found in this zone.
- **Zone B, Public Collections:** This zone is where visitors encounter exhibitions featuring collections, as well as any collections borrowed from other institutions. Typically, these spaces require specific museum level environmental controls, especially in the temporary gallery, to be able to meet loan requirements. Security controls are required.
- **Zone C, Non-Public Collections:** Collections and loaned objects are present in this zone, and access is typically restricted to collections staff. All the collections handling, management, and support areas for the temporary exhibition program — from the shipping/receiving area inward — are part of this zone. These spaces require specific museum level environmental and security controls.
- **Zone D, Non-Public Non-Collections:** This includes areas that do not normally host the public or require specific environmental or security controls. Offices and work areas to support staff activities and programs and non-collections building support, storage, and work areas are in this zone.

The purpose of assigning a zone classification to each space is to provide guidance to the architect and engineer in the next stage of design.

Assumed Estonian Canadian Museum and Archives (VEMU) Space Program

| Space Name | Net Area (sq. ft.) | Net Area (sq. m.) | Museum Zone | Functional Description |
|---|--------------------|-------------------|-------------|--|
| Bicycle Parking | Not in Net Area | Not in Net Area | | Bicycle racks shall be located along a major building approach line and clearly visible from the approach. It should not impede access to walkways or entries for pedestrian traffic. |
| Entry Plaza | Not in Net Area | Not in Net Area | | Partially covered entry and exit area for public access to the museum. |
| Lobby / Entry | 400 | 37.1 | A | Main entry point, gathering and orientation space for all visitors. Includes reception, information and integrated retail kiosk. |
| Coatroom / Lockers | 50 | 4.6 | A | Storage for coats, umbrellas, backpacks and bags. |
| Loading / Receiving Area | 250 | 23.2 | | |
| Multipurpose Space | 1,800 | 167.1 | A | Flexible venue to host a range of events, including seminars, meetings, education programs and temporary exhibits, as required. Flat floor, capable of accommodating approximately 70 persons in a variety of seat configurations. A system of retractable seating should be considered as on-site storage for removable systems is limited. |
| Flexible Classroom / Meeting Room | 600 | 55.7 | B | Flexible meeting space for 10-15 students and for interactive activities including public programs, professional development workshops etc. |
| Exhibitions Gallery | 2,000 | 185.7 | B | Dedicated space for core exhibitions but subject to periodic change. Well proportioned, large column-free flexible exhibition space. Designed to meet "Class A" museum standards. |
| Library and Archives Stacks | 700 | 65.0 | B | Space to display various works from archival collections. |
| Collection Storage (Archives) | 300 | 27.9 | C | Storage for environmentally sensitive materials including archival materials, works on paper, photographs etc. stored in specialized box formats and shelving. Climate control required. |
| Isolation Room | 80 | 7.4 | C | Space for isolation of any collection materials found to be infested with pests, mold, mildew, or other contaminants. Climate control required. |
| Temporary (Transit) Storage | 400 | 37.1 | C | Storage for exhibition loan works being held for installation or pending outward shipment. Climate control required. |
| Administrative | | 0.0 | | |
| Office: Museum (Director) | 100 | 9.3 | D | Private office of standard configuration. Requires finishes, lighting, telephone and data service to office standard. 1 @ 100nsf each. |
| Office: Collections and Programs Supervisor | 100 | 9.3 | D | Private office of standard configuration. Requires finishes, lighting, telephone and data service to office standard. 1 @ 100nsf each. |
| Open Workstation (x1): Flex / PT Position | 60 | 5.6 | D | Open workstation. Systems furniture in flexible configurations based on operational need. Provide drop-in or hoteling capability for staff who spend most of their time working in the galleries or other locations. 1 @ 60nsf each. |
| Lateral Files / Photocopy / Support | 50 | 4.6 | D | File storage centralized with offices. |
| General Building Storage | Not in Net Area | Not in Net Area | D | General storage for building supplies, equipment etc. |
| Garbage and Recycling | Not in Net Area | Not in Net Area | D | Indoor area for temporary trash/recycling storage. |
| Custodial Closet | Not in Net Area | Not in Net Area | D | Storage of cleaning supplies etc. |
| Public Restrooms - Male | Not in Net Area | Not in Net Area | A | Standard restroom to meet all governing building code requirements. |
| Public Restrooms - Female | Not in Net Area | Not in Net Area | A | Standard restroom to meet all governing building code requirements. |
| Total Net Area | 6,890 | 639.7 | | |
| Assumed Gross Ratio 1.45 | 3,103 | 288.1 | | |
| Total Estimated Gross Floor Area | 9,993 | 927.8 | | |

4.2.4 Functional Area Narratives

This section describes the spaces required to achieve the functional needs for the Canadian Estonian Museum (VEMU) in terms of Functional Areas; that is, groups of spaces that work together to house and facilitate specific cultural facility activities or functions. Key spaces are as follows:

Access Points

As a general principle, all public entrances should be friendly, inviting and barrier-free to communicate that the Museum is welcoming to everyone. This is true for the primary access point to the building and any secondary links with the International Estonian Centre and Tartu College.

All main public entry points need to be clearly marked and easily visible from the primary approach to the museum by vehicle and by foot. Each exterior entry point will have overhead protection from the weather and include a vestibule (airlock).

It is understood that the final design will include a single elevator which will serve multiple functions. This design option presents some challenges as this mode of transport will need to move visitors, staff, collections, material goods and garbage.

It is also recommended that bicycle parking be provided within the site boundaries to encourage sustainable access.

Lobby and Visitor Amenities

The Lobby will provide direct access to information and a small integrated retail store, amenities, and controlled access to exhibition and archive spaces, as well as any required security screening. This entry experience includes the following areas:

- The lobby area will be a key **public gathering and orientation space** for all visitors. It will also provide space for any queuing, access to the orientation and information kiosk, the theater and potentially overflow crush space for other program elements. Non-sensitive interpretive content may also be displayed in this space to enhance the overall visitor experience. Visitors in the lobby should have direct access to the elevator and stairs. A direct link to Tartu College is recommended if possible. Visibility to the lobby from the street, and a strong architectural presence (curb-appeal) will be a key feature in attracting visitors to the museum.
- An **Information / Orientation/Retail Kiosk** will be situated so that it is visible upon entry with sufficient queuing space. It will provide museum-related information, including information about upcoming events. Although most admissions are assumed to be free, the space will require cash registers when admission is charged and a donation box. Integrated with the information and admissions function will be a small 100 sq. ft. retail area.
- The **Coat Check** is accessed directly off the lobby. This will be a self-service storage area for coats, umbrellas, bags, etc. Wheelchair and stroller storage space may also be provided.

Multipurpose Event Space

This space will be a flexible venue to host a range of events, including seminars, meetings, education programs and periodic temporary exhibits, as required. The space should have a flat floor capable of accommodating approximately 100 persons in a variety of seating and presentation configurations. Ideally, a system of retractable seating should be considered for this venue, as on-site storage for removable systems is limited.

Educational Programming Spaces

To support the current and future educational program, the Museum program includes a single multi-purpose classroom / meeting room. As a general recommendation, furniture in the education area should be flexible and able to adapt to a variety of programs or groups sizes. The classroom should also include secure millwork for the storage of educational related items, along with counter space and possibly wall-mounted display system to hang art work and support object-based study programs.

Galleries and Archives

The Museum will feature a dedicated single, 2,000 sf (186 sq. metres) **Exhibition Gallery** and a 700 sf (65 sq. m.) **Library and Archives** stacks area. Both should be column-free flexible spaces that will show rotating/travelling exhibitions drawn from local, national, and international repositories, as well as private collections. The Gallery must meet the requirements of external Curators, Conservators and Lenders for lighting, finishes, communications systems, environmental conditions and security for collections with additional provision for microclimates as required.



Visibility into the Archives is required both in supporting the overall mission of the Estonian Canadian Museum and Archives (VEMU) but also in terms of creating a welcoming and open experience for visitors. Design teams should consider views in and out of the archives area when laying out key public areas.

Exhibition walls, floor and ceilings should all accommodate artifacts and works of art and installations of varying media and size, but also serve teaching purposes. If possible, there should be direct access from the elevator without the need to cross other galleries or public spaces. Since food/ garbage will use the same elevator (but at different times), a strict cleaning protocol will be required to ensure the safety of collections.

It is recommended that the Gallery and Archive be designed to meet minimum "Class A" museum standards. Environmental conditions to be a minimum 70° F +/-4° F and 50% RH +/- 5%. Minimum 18'-0" (recommend 20'-0") clear ceiling height is recommended. Both will require adjustable track lighting with zoned capability.

Exhibition / Collection Support

Both the Gallery and Archive exhibition display areas require critical back-of-house facilities for receiving shipments, unpacking crates, temporary storage, and safe movement of collections. In this case, our understanding is that its exhibition support spaces will remain in Tartu College. However, it is also noted that the new Museum will

provide two key areas critical for temporary or changing exhibits. These are an isolation room and temporary storage of crated exhibit contents.

Best practice recommends that a dedicated freight elevator be provided for the movement of collections only. However, it is anticipated that a **single shared elevator** will transport the public, collections, non-collections, food and garbage. Because of this, collections/loans will need to be moved directly to their final destination upon arrival. Collection movement will also need to be tightly scheduled during off-hours to avoid sharing elevator needs with visitors/evening public programs, and/or catering.

Elevator / vestibules will also need to follow strict cleaning protocols to avoid cross-contamination between food/garbage and collections, and for the safety of visitors.

Our assumption is that Moving Equipment Storage will be housed in Tartu College. Such equipment will need to be kept out of the way of the collection delivery line of travel and not detract from the visitor experience for those requiring use of the elevator.

Administrative Spaces

Providing healthy workplaces and environments for staff and volunteers will be critical to the sustainability of VEMU. Staff spaces should be uplifting with access to natural light and should provide opportunities for a variety of work-related functions to occur. As an overall planning principle, all Staff and Volunteer spaces should be positioned to enable exterior views and direct outdoor access to illustrate a commitment to creating positive working environments that lift the human spirit.

Dedicated Office and Open-workstation spaces are included in the space program. Assumptions regarding administrative spaces are as follows:

- **Private Offices** have been programmed to accommodate key leadership positions of Museum Director and the Collections and Programs Supervisor. These offices should be of standard fit out.
- An **Open Workstation** has been provided to support part time or flex positions and to enable drop-in or hoteling capability for staff who spend most of their time working in other locations.
- A **Copy Room** will house the photocopier and office supplies, lateral files etc.as needed.
- **Male, Female and Unisex Restrooms** should also be available to all staff, volunteers and those in the building who work primarily at Tartu College or the International Estonian Centre.

Building Support

Operational building support spaces have been provided and should be verified by the architect. At a minimum these space should include:

- **Janitor's Closets**, complete with slop sink, floor drains and space for storage of cleaning carts on each level.
- **IT Server, AV and IT Closets and Rooms** should be provided to support the whole facility.

4.3 Capital Investment and Capital Funding Sources

- The **capital project is assumed to be in the range of \$7.6 million**, to be funded by a combination of private fundraising, in large part from the Estonian Canadian community, and government grants.

4.4 Mission and Collections

- It is assumed that the mission statement of the Estonian Canadian Museum and Archives (VEMU) will be very similar to that of the existing Estonian Studies Centre. That mission statement is “**to advance the cultural heritage of Estonian Canadians.**”
- The Estonian Canadian Museum and Archives (VEMU) is assumed to function as **both a museum offering exhibitions and programs and as a public archives.** Collections will continue to be an important part of both the museum exhibitions and the archives.
- The primary method of collections acquisition will be by donation and bequest.

4.5 Visitor Experience

The visitor experience is the main factor that motivates initial visits (based on favourable word of mouth) and repeat visits (based on favourable experiences and perceived value for time and money spent). Key assumptions are as follows:

- Exhibitions will include background information on Estonian history and culture, including the period of Soviet occupation, but focus primarily on the Estonian Canadian experience. As visitors enter they will experience Estonian nature sounds (rolling of the sea, winds in the forest, birds singing, song festival sounds etc.) that will play from speakers as visitors pass a map and large images of Estonia on the wall.
- After entering visitors will be exposed to an integrated information centre and small retail store that will offer Estonian related books, CDs, films, souvenirs, the newspaper Estonian Life, and other opportunities. The information centre will offer information about the exhibitions, programs and events of the Estonian Canadian Museum and Archives (VEMU) as well as about other Estonian organizations and their events. The information centre and retail store will be the site of screens for various security cameras in the building.
- The core or “permanent” exhibition will tell the story of Canadian Estonians with parts updated periodically each year to keep the exhibition fresh. The core exhibit will be made up of the following parts:
 - **Estonian origins:** An overview of Estonian history as a general timeline along with more detailed reading on screens.

- **The immigration of Estonians to Canada:** Where from and why, settling in, what are the current positions and roles of groups in the Canadian Estonian community today. The exhibit would focus on the three waves of immigration. The first wave was during the transition from the 19th to 20th century. They were, economic immigrants and pioneers who settled primarily in Alberta. The second wave included refugees of the Second World War and the third wave arrived with the breakup of the Soviet Union and restoration of Estonian independence and greater freedom to travel. Each of the journeys will be traced using maps, photographs, documents, artifacts and oral histories, as practical. Differences and similarities among each of the waves will be highlighted along with common ties that link Estonians with other groups of immigrants to Canada. This will allow the Estonian immigrant and refugee experience to be a lens through which other similar experiences may be viewed.
- **Estonian Life in Canada.** A virtual map with a touchscreen where different Estonian places in Canada are presented: homes of Estonians over time, grocery stores and food businesses, buildings by Estonian architects, Estonian cultural centres, churches and other meeting places, summer camps and more. For every spot/object on the map, one will be able to learn more through photos, reading additional texts, listening to interviews and more. The same material could be accessible online too.
- Exhibitions will answer questions such as: what is Estonia, where is Estonia, who is an Estonian, who is a Canadian Estonian. Exhibits will use both traditional museum methods such as display cases, photographs, panels and labels as well as more contemporary audio visuals, touchscreen computers, audio stations, and interactive games.
- The **exhibition spaces will be flexible** so that they can be used for smaller seminars or receptions or be used as classrooms. To maximize available space, exhibition opportunities will also include staircases and other circulation spaces.
- Temporary and travelling exhibits will continue to be displayed at Tartu College on the ground floor and in its event hall.
- In addition to the exhibits, the museum will continue to organize lectures, seminars, conferences, workshops (handicraft, cooking etc.), film and theatre nights, concerts (Estonian Music Week), and Jane's Walk.
- It is assumed that VEMU will periodically **lease exhibitions** from the National Archives of Estonia, Estonian National Museum, National Library of Estonia, Art Museum of Estonia, Estonian Sports and Olympic Museum, Estonian Theatre and Music Museum and other memory institutions in Estonia.



- The new facility will enable VEMU to **widen its research function**. The existing archives, library and museum collections represent the largest Estonian collections outside of Estonia. They offer a unique opportunity for academic research either onsite or online as responses to researchers are fulfilled by email, including opportunities to order digital copies of materials. Collaborations already exist between the Chair of Estonian Studies at the University of Toronto, as well as other Canadian, Estonian, and international institutions of higher education, and should expand in the future, including the University of Tartu, the Centre of Excellence in Estonian Studies, Tallinn University, and Under and the Tuglas Literature Centre.
- In addition to on-site visitor experiences, the Museum will offer access by means of an **independent website and on-line databases**.

4.6 Operations and Revenue Generation

4.6.1 Operating Schedule

The recommended operating schedule for the Estonian Canadian Museum and Archives (VEMU) takes into account the following factors:

- Attendance levels will be limited and so cost control is more important to long-term sustainability than attendance and revenue generation. We recommend being closed to the public on Sundays and Mondays, hence a **5-day per week operation**.
- One peak period is likely to be on Saturdays during or after classes at the International Estonian Centre, assuming the same hours for classes as currently at Estonian House (9:30 a.m. to 12:30 p.m.). Another peak period is likely to be on Tuesday evenings in association with classes at the Toronto Estonian School from 7 to 9 p.m. These are opportunities for parents to attend the Museum when their children are in classes.

- Close at 5 p.m. to allow time for periodic evening rentals and events, with the exception of ***Tuesdays and Thursdays, which should remain open to the public until 9 p.m.*** This allows for crossover opportunities not only with evening classes at the Toronto Estonian School but also with the Bata Shoe Museum across the street, which remains open on Thursdays to 8 p.m.
- Recommended days and hours open to the public are summarized as follows, but are subject to modification:

| Days | Hours |
|--------------------------------|------------------|
| Sunday and Monday | Closed |
| Tuesday and Thursday | 9 a.m. to 9 p.m. |
| Wednesday, Friday and Saturday | 9 a.m. to 5 p.m. |

4.6.2 Admissions and Ticketing

- Given the limitations of 2,000 square feet of dedicated exhibition space and the mission of advancing the cultural heritage of Estonian Canadians, it is assumed that ***admission will be free of charge to exhibitions.*** The exception will be if there are major level exhibitions from Estonia or elsewhere. In those cases a fixed admission charge will be applied. For the purposes of these projections, charged admissions for major exhibitions have been assumed to occur after the years projected in this study.
- Interactive donation boxes will be available to visitors as they enter and exit to encourage them to donate to the Museum. The box will include a message that the donation helps to preserve the heritage of Estonian Canadians and to help provide free admission. In addition the box will be interactive by responding mechanically to the placement of money in the box. A volunteer should be identified to conceptualize and design the interactive donation boxes. Recognizing that fewer people are carrying cash, there should be an option to “tap to donate” using a credit card.

4.6.3 Other Revenue Generation

As is the case with almost all museums, the Estonian Canadian Museum and Archives (VEMU) will require operating revenues from a combination of earned and contributed sources as follows:

- **Retail:** The retail store is assumed to be 100 net square feet of public space, integrated with information and admissions. This recognizes the limited size of the overall museum space and a trend to smaller museum retail stores as people are increasingly making retail purchases online. The product line is assumed to relate to the mission of the Museum to include books, reproductions of signature items from the exhibitions, and VEMU branded products and others developed by management at the time.
- **Café:** Tartu College has a café, which is assumed to continue to operate to serve the students of the College. In addition, the new International Estonian Centre will include a café. ***No food service is assumed in the Estonian Canadian Museum and Archives (VEMU).***

- **Facility Rental:** There will be opportunities for smaller rentals in the planned 100-seat multipurpose space but ***most rentals will take place at the neighbouring International Estonian Centre or existing spaces offered by Tartu College.***



- **Public and Educational Programs:** Existing programs will be maintained and enhanced with new programs and events. Most programs will be free, with donations encouraged and others will have fixed charges, as determined by the Board and Museum Director.
- **Membership:** With free admission to exhibitions, a very small retail store and limited rentals potential in a small space, a lower level membership program is not recommended. Rather the assumption is a ***Friends program in which tax receipts are available for supporting the Museum when there are no direct benefits provided.***
- **Annual Fundraising Gala Dinner:** This is common for museums and assumed for the Estonian Canadian Museum and Archives (VEMU). The gala will be held at the neighbouring International Estonian Center, if practical.
- **Other Earned Sources:** These might include interactive donation boxes and other sources to be developed by management at the time.
- **Endowment:** It is assumed that the capital campaign for the Museum will include one million dollars to support operating costs. At an average 4.5% return on investment this would generate \$45,000 per year.

4.7 Governance, Organizational Structure and Staffing

- **Governance:** The Estonian Canadian Museum and Archives (VEMU) will be governed by the Board of Directors of the Estonian Studies Centre, which operates as a Registered Charity of Ontario and able to issue tax receipts for donations.
- **Staffing:** The Museum will seek to develop a balance between the need for a professional and skilled staff to fulfill its mission and recognition that controlling staff

costs is just as important as attendance and earned income to ongoing sustainability. This will be facilitated by an assumption that some staff of Tartu College and all staff of the Estonian Studies Centre will allocate a percentage of their time in support of the Museum. Tartu College will pay directly for some of the staffing costs.

The following table sets out the recommended/assumed organizational structure and staffing plan for the Estonian Canadian Museum and Archives (VEMU) during its opening three years of operation. This includes existing staff of the Estonian Studies Centre as well as additional staff that will be required, some of whom will be ***dedicated additional Museum staff while others will be allocations from Tartu College***. The recommendation/assumption is that the staff of the Estonian Studies Centre will increase from the current 2.50 FTE positions to 7.45 FTE with implementation of the Museum. Staff will be supported by volunteers. The Estonian Studies Centre is already very successful in generating support from volunteers. This should increase with the implementation of the Museum.

| Recommended/Assumed Staffing | Full-Time Equivalent (FTE) |
|---|-----------------------------------|
| Existing Staff of Estonian Studies Centre | |
| Director/Curator | 1.00 |
| Collections and Programs Supervisor | 1.00 |
| Programs and Events | 0.50 |
| Additional Staff Paid by ESC Museum | |
| Collections and Program Supervisor | 1.00 |
| Information/Admissions/Retail | 1.20 |
| Rentals/Events | 0.25 |
| Additional Allocation of Staff of Tartu College | |
| Housekeeping | 1.00 |
| Rentals/Events Manager | 0.20 |
| Development/Fundraising | 0.50 |
| Building Maintenance | 0.30 |
| Security/Weekend Staff | 0.20 |
| Other Staff Allocations | 0.30 |
| | |
| Total Staff | 7.45 |

4.8 Branding and Marketing

The key recommendations/assumptions are as follows:

- **Branding:** The name/brand, Estonian Canadian Museum and Archives (VEMU) is subject to modification if a major funder is willing to purchase long-term naming rights in return for a substantial capital contribution and ongoing support for operations.
- **Advertising, promotion and publicity** for the Museum will continue to be focused on Estonian publications and Tartu College, with an increased emphasis on social media and the web. It will also be part of the Bloor St. Culture corridor webpage, mobile app and social media platforms.

4.9 Other Assumptions

- The Museum will not be responsible for payment of any property taxes.
- If there is any debt associated with the new facility, the Museum will not be responsible for any annual outlay for debt service as part of its operating costs.
- All revenue and expense projections will be stated in year 2019 constant dollars, thus a specific inflation factor is not included in our estimates. However, some revenues and expenses tend to increase at a higher rate than the prevailing rate of inflation. For example, staff compensation levels will be projected to grow on an annual basis by 0.5% above whatever the inflation rate is each year.

It must be noted that financial projections are subject to the inherent uncertainties of the future. There is no representation that the projections will be realized in whole or in part. However, taking the assumptions into account and based on the scope of our work, we assume that the projections in the next chapter of this report are reasonable.

5. Attendance, Operating Revenue and Expense Projections

This chapter sets out our projections of attendance, operating revenues and expenses for the Estonian Canadian Museum and Archives (VEMU) in its opening three years of operation. Without a clear specific opening date the projections refer more generally to Year 1, Year 2, and Year 3, with Year 3 a stabilized year predictive of subsequent years of operation.

The projections are based on the Contextual, Comparables and Market Analyses in Chapters 2 and 3 and the assumptions in Chapter 4, as well as the judgment and experience of the consultants. All financial projections are in 2019 constant dollars and change at whatever the prevailing rate of inflation is at the time. However, some costs, such as staffing, tend to increase at a faster pace than inflation, and this is reflected in the specific projections.

Since the Museum will be part of and governed by the Estonian Studies Centre, the projections build upon the statement of operations for the ESC and often use as a base level the average of its figures for 2016, 2017 and 2018. The projections assume that base level support for the Estonian Studies Centre will be maintained to allow the bottom line of the projections to be the additional amount required from Tartu College and private and government sources to break even on operations.

5.1 On-Site Attendance Projections

To prepare attendance projections first requires a reasonable definition of who would or would not be defined as a visitor. For the purposes of this analysis a visitor is defined as someone who attends an exhibition or program in the Estonian Canadian Museum and Archives (VEMU). Those who attend rental opportunities are included in the definition but excluded are staff and volunteers, service and delivery people. While outreach and access through a web site are important, the attendance projections do not include external events, outreach programs or web site hits/visits.

It must be emphasized that there is no single and simple computer formula that leads to credible attendance projections as there are many qualitative variables that affect potential attendance levels. A variety of quantitative methods have been used to create

ratios that help lead to estimated attendance figures. Each method has weaknesses, but all have been used to help to guide our judgment regarding potential attendance levels.

It must also be emphasized that comparing attendance levels from other institutions is often risky because there are a variety of definitions of what constitutes a visitor and no complete certainty that the comparative attendance figures reported are accurate. To help address the weaknesses inherent in such ratios, Section 5.2 offers our judgment regarding the impact on attendance of a variety of largely qualitative factors.

5.1.1 Extrapolation from Existing Attendance at VEMU Events

The following table indicates average attendance levels over the period from 2016-2018 at existing VEMU events, programs and exhibitions. Total attendance was 3,920, of whom 69% were free admission, largely exhibition, visitors. Some 19% attended by-donation events and 12% paid for ticketed events.

| ESC Event/Exhibition/Program Attendance by Category | | | | |
|--|--------------------------|-----------------------------|---|-----------------------|
| Year | Ticketed Visitors | By Donation Visitors | Free Visitors (Mainly Exhibitions) | Total Visitors |
| 2016 | 381 | 913 | 2,633 | 3,927 |
| 2017 | 309 | 647 | 2,198 | 3,154 |
| 2018 | 738 | 657 | 3,284 | 4,679 |
| Total 2016-18 | 1,428 | 2,217 | 8,115 | 11,760 |
| Average 2016-18 | 476 | 739 | 2,705 | 3,920 |
| % of Total 2016-18 | 12% | 19% | 69% | 100% |

Extrapolating from these figures is difficult given uncertainty as to the specific exhibitions, programs and events to be offered each year. However, purpose built exhibition and programming spaces and a museum staff will substantially increase potential attendance levels. Based on judgment and experience, and taking into account continued free (by donation) admissions to exhibitions, and the data from similar museums discussed below, we estimate five times as many visitors from the rounded 3,900 visitor base level attendance to about **19,500** visitors in the stabilized Year 3.

5.1.2 Benchmark from Similar Operating Budget Museums in Ontario

The Estonian Canadian Museum (VEMU) would be categorized as a “medium sized” museum in Ontario on the basis of an operating budget of between \$100,000 and \$1,000,000. Median attendance for these museums according to the latest Canadian Heritage Survey was 17,900. For the purposes of establishing various methods to estimate attendance levels it is assumed that VEMU will achieve this median figure, or **17,900** annual visitors.

5.1.3 Extrapolations from U.S. Museums Focused on Immigrants from Baltic Countries

Data in Chapter 2.2 include selected museums in the United States that focus on immigrants from Baltic countries. The following table utilizes formulas based on the size of the exhibition space and regional population to help inform attendance projections for the Estonian Canadian Museum and Archives (VEMU) in the stabilized Year 3 of operation. The formulas are as follows:

- Visitors per Square Foot Exhibition Space:** As shown on the following table the mid-point between the median and average figures is 2.37 visitors per square foot exhibition space. VEMU is assumed to have 2,000 sq. ft. of dedicated exhibition space, and it is also assumed there will be periodic temporary exhibitions in the 1,800 sq. ft. multipurpose space. For this reason we have estimated that VEMU will offer a combined average of 2,900 sq. ft. of exhibition space. Applying the 2.37 ratio suggests an attendance total of a rounded **6,900 visitors in Year 3**. This figure appears far too low given existing attendance at Estonian Studies Centre exhibitions, programs and events. Moreover, three of the four selected U.S. museums charge admission, and the assumption is largely free admission to VEMU, which will serve to increase attendance levels. Therefore although this estimate is too low it helps to offset the population-based estimate that is clearly too high.
- Visitors per Thousand Regional Population:** VEMU is located in the large Toronto Census Metropolitan Area (CMA), with a population of about 5,928,000 in 2016. The following table show visitors per thousand population for the U.S. cities in which the selected comparable museums are located. The mid-point between the median and average figures is 10.34. When applied to the Toronto CMA this suggests a stabilized attendance of about **61,300** for VEMU. This figure is too high but does help to offset the too low figure from the exhibition estimate. Of greater importance is the number of persons of the subject ethnicity in the regional population. However, there are also spouses that are not included and conversely people who have little or no interest in history and culture of their ethnicity. No calculation is therefore made to project attendance based on the number of persons who claim Estonian descent.

| Attendance Ratios from U.S. Museums Focused on Immigrants from Baltic Countries | | | | | | | |
|---|----------------|------------------------|----------------------------|------------------------------|---------------------------------------|---------------------------|-----------------------------------|
| Museum Name | Location | Adult Admission Charge | Attendance: Total Reported | Total Exhibition Space (nsf) | Visitors per Sq. Ft. Exhibition Space | MSA (Regional) Population | Visitors per 1,000 MSA Population |
| Balzekas Museum of Lithuanian Culture | Chicago IL | \$9.00 | 30,000 | 20,000 | 1.50 | 9,500,000 | 3.16 |
| Latvian Museum, | Rockville MD | \$0.00 | 750 | 800 | 0.94 | 6,133,000 | 0.12 |
| American Swedish Institute | Minneapolis MN | \$10.00 | 50,000 | 15,000 | 3.33 | 3,600,000 | 13.89 |
| Nordic Museum | Seattle WA | \$15.00 | 110,000 | 31,000 | 3.55 | 3,500,000 | 31.43 |
| Median | | | 40,000 | 17,500 | 2.42 | 4,866,500 | 8.52 |
| Average | | | 47,688 | 16,700 | 2.33 | 5,683,250 | 12.15 |
| Mid-Point | | | 43,844 | 17,100 | 2.37 | 5,274,875 | 10.34 |

5.1.4 Extrapolation from Small Culturally Specific Museums in Toronto

Chapter 2.3 evaluates the experience of two small culturally specific museums in Toronto, both of which are focused on Eastern European immigrants to Canada – the Ukrainian Museum of Canada – Ontario Branch, and the Lithuanian Museum-Archives of Canada.

Both offer free admission. The Ukrainian Museum reports about 1,500 annual visitors in a very small space offering 1,000 sq. ft. for exhibitions, or 1.5 visitors per square foot while the Lithuanian Museum reports 2,400 visitors in 3,900 sq. ft. of space, or 0.6 visitors per sq. ft. exhibition space. The average of the two is 1.05 visitors per square foot of exhibition space. Applied to the assumed 2,900 nsf of exhibition space this suggests a very modest attendance of about **3,000** visitors. This is clearly far too low.

5.1.5 Averaging All Quantitative Methods

As stated, all of the quantitative methods used to estimate attendance have weaknesses but are nonetheless helpful in establishing benchmarks. As shown on the following table, the mid-point between the median and average figures utilizing these methods leads to an attendance of about 19,800 visitors in the stabilized Year 3. This figure does not take into account qualitative factors to finalize the attendance projections, discussed below.

| Quantitative Method: Based On | Attendance Estimate |
|--|---------------------|
| Attendance at existing VEMU events | 19,500 |
| Median figure for similar museums in Ontario | 17,900 |
| U.S. museums focused on immigrants from Baltic countries – exhibition space | 6,900 |
| U.S. museums focused on immigrants from Baltic countries – regional population | 61,300 |
| Small culturally specific museums in Toronto | 3,000 |
| Average (rounded) Year 3 | 21,700 |
| Median (rounded) Year 3 | 17,900 |
| Mid-Point (rounded) Year 3 | 19,800 |

5.1.6 Judgment Regarding Impact of Various Factors on Attendance Levels

As stated, all of the ratios used to project future attendance levels have weaknesses. While the ratios help to suggest stabilized attendance levels for the Estonian Canadian Museum and Archives (VEMU) of about 19,800 annual visitors, other factors, both positive and negative, help to refine the analysis and guide our judgment:

- **Site/Location Factors:** The site of the Estonian Canadian Museum and Archives (VEMU) on Bloor West across the street from the Bata Shoe Museum and close to other facilities of the Bloor Street Culture Corridor is an excellent location and better than any of the US or Canadian culturally specific museums compared in this study.

The resident population within easy walking distance of the Museum will be growing with the construction of neighbouring condominiums. The nearby Bata Shoe Museum attracts about 100,000 annual visitors, of which 11,000 arrive as school groups. These are largely charged admission visitors, so the opportunity for free admission to the Estonian Canadian Museum and Archives (VEMU) should help to increase attendance levels, including school groups. Proximity to the subway is also a strength while limited parking is a weakness.

- **Market Factors:** The primary market for the Estonian Canadian Museum and Archives (VEMU) will be persons of Estonian descent or with family or other connections to Estonians. A weakness is the small size of the self-identified Estonian population in the Toronto regional area. However, primarily free admission and an excellent location should help to widen the market to other ethnicities and also to students living in residence at Tartu College.

It is our judgment that as a consequence of these factors, on-site attendance levels in the stabilized Year 3 will be somewhat higher than suggested by the ratios above. We estimate a rounded 21,000 visitors in Year 3. As is common, Year 1 attendance will be 20% higher or about 25,000 visitors, with Year 2 closer to Year 3 levels as summarized in the following table.

| | Final Total Projected Attendance (rounded) |
|--------|--|
| Year 1 | 25,000 |
| Year 2 | 22,000 |
| Year 3 | 21,000 |

5.1.7 Projected On-Site Attendance by Key Market Segments

The table that follows provides our estimates of total on-site attendance by main resident, school and tourist market segment as well as rentals/events visitors. The projections are informed by the following estimates and assumptions.

- **Resident, School and Tourist Market Segments:** Resident and tourist visitors are likely to be of Estonian descent or have connections to the Estonian community. However, free admission and a location along Bloor Street and in proximity to the Bata Shoe Museum should help to widen attendance to others as well. The same pattern will apply to school groups with many school visitors attending from the Estonian School to be located within the adjacent International Estonian Centre. Additional school visits are also likely from among those visiting the Bata Shoe Museum. Combining a visit to the Bata Shoe Museum with the free admission Estonian Canadian Museum and Archives allows the visitors to compare an immigrant and refugee experience story to the indigenous stories of the Bata Shoe Museum.
- **Facility Rentals Visitors:** Those attending events and programs offered by the Estonian Canadian Museum and Archives (VEMU) are accounted for within the resident, school and tourist market segments. Separate are those attending rentals within the Museum utilizing the planned 100-seat multipurpose space. Most rentals will take place in the adjacent and larger International Estonian Centre or the existing spaces in Tartu College

The attendance projections for the Estonian Canadian Museum and Archives (VEMU) are summarized as follows, building upon the base level 3,900 visitors to the Estonian Studies Centre.

| Attendance Projections | Base | | | | | | |
|---|--------------|-------------|-------------|---------------|---------------|---------------|--|
| | Level | Year 1 | Year 2/3 | Year 1 | Year 2 | Year 3 | |
| Projected Total Attendance (rounded) | | | | 25,000 | 22,000 | 21,000 | |
| Attendance by Main Segment | | | | | | | |
| Residents | | 75% | 70% | 18,750 | 15,400 | 14,700 | |
| School Groups | | 5% | 10% | 1,250 | 2,200 | 2,100 | |
| Tourists | | 15% | 15% | 3,750 | 3,300 | 3,150 | |
| Rentals Visitors | | 5% | 5% | 1,250 | 1,100 | 1,050 | |
| Total | 3,900 | 100% | 100% | 25,000 | 22,000 | 21,000 | |

5.2 Projected Operating Revenues

This section sets out our projections of operating revenues during the opening three years of the Estonian Canadian Museum and Archives (VEMU), with Year 3 representative of subsequent years of operation. Projections are set out in the following categories:

- Admissions by Donation for Exhibitions
- Cultural Programs and Events;
- Facility Rentals;
- Retail Sales;
- Membership Programs;
- Fundraising Events (net);
- Other Sources of Earned/Miscellaneous Income;
- Continued Offset of Building Occupancy Costs by Tartu College;
- Existing ESC Staffing Costs Paid by Tartu College;
- Endowment;
- Existing Donations;
- Existing Financial Support from Tartu College.

The bottom line of the projections will thus be the *additional* amount required from Tartu College, private and government funds each year to allow the Estonian Canadian Museum and Archives (VEMU) to break even on operations.

5.2.1 Admissions by Donation for Exhibitions

It has been assumed that free admission will be offered to all visitors to exhibitions. A major level exhibition capable of being charged is not assumed within the three years projected in this study and so the likely high costs of bringing in such an exhibition are not factored into the expense projections. Admissions revenue is therefore by donation.

The ESC has been successful in generating revenue from donations, averaging \$4.39 per visitor for by-donation events and programs and exhibitions over the period from 2016-2018. However, most of the donations income was for programs. We estimate \$500 of the \$3,270 in donations would have been for exhibitions.

Our estimate of admissions revenue by donation for exhibitions assumes that 70% of all visits will be to exhibitions. It is also assumed that an interactive donation box with a message that the donation helps to pay for admission to those who cannot afford it and to preserve the heritage of Estonian Canadians will help to encourage donations. We estimate an average of \$1.50 per visitor to exhibitions each year. Some visitors will give much more and others nothing. These estimates lead to the following projections.

| Admissions by Donation to Exhibitions | Base Level | Year 1 | Year 2 | Year 3 |
|--|-------------------|-----------------|-----------------|-----------------|
| Total Attendance | | 25,000 | 22,000 | 21,000 |
| Total Attendance to Exhibitions | | 17,500 | 15,400 | 14,700 |
| Average Donation per Exhibition Visitor | | \$1.50 | \$1.50 | \$1.50 |
| Total Revenue | \$500 | \$26,250 | \$23,100 | \$22,050 |

5.2.2 Cultural Programs and Events

The Estonian Studies Centre generates income from programs and events that have both fixed fee ticket sales or are by donation. The average revenue generated during the period from 2016-2018 was about \$17,000 for on-site programs, with a substantial \$37,400 in ticket sales for the Estonian Music Week in 2018. Some \$500 from this amount has been allocated to donations associated with exhibitions, leaving \$16,500 as the base level of ticket sales and by-donation support for cultural programs and events.

The various programs that have been offered include concerts, lectures, film nights, workshops, fashion shows and other programs held primarily at the Estonian Studies Centre or that could have been held in the Estonian Canadian Museum and Archives (VEMU) if it existed. Some off-site events will continue to take place even with implementation of the new Museum. Some revenues for cultural programs and events in the Museum will be from ticketed events and other revenues by donation. With a museum, including a 100-seat multipurpose space, we estimate that revenues will triple in the opening year and increase modestly in subsequent years. Projected revenue is therefore as follows.

| Cultural Programs and Events | Base Level | Year 1 | Year 2 | Year 3 |
|-------------------------------------|-------------------|---------------|---------------|---------------|
| Total Revenue | \$16,500 | \$49,500 | \$52,000 | \$55,000 |

5.2.3 Facility Rentals

The new Estonian Canadian Museum and Archives (VEMU) is to include a 100-seat multipurpose space to be used for a combination of opportunities. These include temporary exhibitions, public and educational programming and facility rentals. As a multi-purpose space it could be available during evening hours for private and corporate functions when the rest of the museum is closed. Such functions have not taken place in

the Estonian Studies Centre as all revenue has been categorized with Cultural Programs and Events.

Although there are opportunities for evening rentals in the Museum, larger events will take place in the adjacent International Estonian Centre or in the existing spaces in Tartu College. This will limit the number of rentals and the revenue potentially generated in the Museum. Our projections assume an evening rental about 40 in Year 1 and growing to 45 by Year 3. The amount that could be charged for the space will start at an average of \$800 and grow modestly each year. This leads to the following projections.

| Facility Rentals | Base Level | Year 1 | Year 2 | Year 3 |
|----------------------------------|-------------------|-----------------|-----------------|-----------------|
| Rentals per Year | | 40 | 43 | 45 |
| Average Income per Larger Rental | | \$800 | \$825 | \$850 |
| Total Revenue | \$0 | \$32,000 | \$35,475 | \$38,250 |

5.2.4 Retail Sales

The assumption is a modest 100 net square feet of public space integrated with information and admissions, when charged in the future. Revenues will be modest and estimated to average 90 cents per visitor in the opening year and increase as shown on the following table. Retail goods sold are shown with the operating expense projections later in this chapter.

| Retail Sales (100 sq. ft.) | Base Level | Year 1 | Year 2 | Year 3 |
|-----------------------------------|-------------------|-----------------|-----------------|-----------------|
| Total Attendance | | 25,000 | 22,000 | 21,000 |
| Sales per Visitor | | \$0.90 | \$0.93 | \$0.95 |
| Total Net Revenue | \$0 | \$22,500 | \$20,460 | \$19,950 |
| Sales per Sq. Ft. | | \$225 | \$205 | \$200 |

5.2.5 Membership Programs

The Estonian Studies Centre reported membership fees that averaged a rounded \$5,400 over the period from 2016 to 2018 from various operating programs/clubs (choirs, literary, etc.) that utilize and support the Centre. It is assumed that this program/club membership program will remain at current levels.

It has also been assumed that the Estonian Canadian Museum and Archives (VEMU) will introduce a Friends membership that is based very much on support for the mission of the Museum as opposed to on the value for money sought by those in lower level membership categories. Members will be largely from within the Estonian community. We project that, with the excitement associated with the new Museum, it will open at 125 memberships paying an average of \$100, and declining in subsequent years. Our projections are as follows.

| Membership Programs | Base Level | Year 1 | Year 2 | Year 3 |
|----------------------------------|-------------------|-----------------|-----------------|-----------------|
| Program/Club Membership | \$5,400 | \$5,400 | \$5,400 | \$5,400 |
| Friends Membership | | | | |
| Total Memberships | | 125 | 110 | 100 |
| Average Revenue per Membership | | \$100 | \$105 | \$110 |
| Total Friends Membership Revenue | | \$12,500 | \$11,550 | \$11,000 |
| Combined Total Revenue | \$5,400 | \$17,900 | \$16,950 | \$16,400 |

5.2.6 Fundraising Events (net)

The Estonian Studies Centre averaged about \$10,600 in revenues from its fundraising dinner over the period from 2016-2018. Excitement associated with the new Estonian Canadian Museum and Archives (VEMU) should help to increase revenues from this source, particularly if the message is that such events help to maintain free admission access to visitors and bring in exhibitions from Estonia. Given capacity issues, such events are more likely to take place in Tartu College or the adjacent International Estonian Centre.

Taking the foregoing into account we estimate the net income from fundraising events will double from the base level in the stabilized Year 3 and be higher in the opening year given excitement associated with the new museum. This leads to the following projections.

| Fundraising Events (net) | Base Level | Year 1 | Year 2 | Year 3 |
|---------------------------------|-------------------|---------------|---------------|---------------|
| Total Revenue | \$10,600 | \$25,000 | \$22,000 | \$21,200 |

5.2.7 Other Earned Income

Financial statements for the Estonian Studies Centre include revenues for interest income and sundry revenues. From 2016-2018 these revenues averaged about \$12,500. There may be other sources of earned income developed over time so revenues from such sources have been increased as follows over the three years projected.

| Other Earned Income | Base Level | Year 1 | Year 2 | Year 3 |
|----------------------------|-------------------|---------------|---------------|---------------|
| Total Revenue | \$12,500 | \$15,000 | \$17,000 | \$20,000 |

5.2.8 Endowment

It has been assumed that the capital campaign for the Estonian Canadian Museum and Archives (VEMU) will include \$1 million in principal that will be available for all three years projected. Assuming an annual average rate of return in each of those years at 4.5% results in **\$45,000 per year**.

5.2.9 Existing Occupancy Costs Paid by Tartu College

Tartu College absorbs the occupancy costs of the Estonian Studies Centre. This will continue with implementation of the Estonian Canadian Museum and Archives (VEMU). The existing occupancy costs for the ESC are about **\$125,000**. Additional occupancy costs associated with the Museum are shown in the operating expenses later in this chapter.

5.2.9 Existing ESC Staffing Costs Paid by Tartu College

Tartu College currently funds all of the staffing costs associated with the Estonian Studies Centre. These costs totaled **\$156,800** in 2018, which has been established as the base level for the staffing cost projections. This level of funding support is assumed to continue to allow the bottom line of the projections to be the additional amount required from Tartu College, private and governmental support to break even on operations each year.

5.2.10 Existing Donations

Over the past three years the amount received from donations, largely from within the Estonian community and from the government of Estonia for programs, events and other special programs. The amount has varied widely on a year by year basis and averaged about \$127,900 per year over this period. There will be a need to increase this amount with implementation of a new Museum. However, it is not credible to project how much will be raised. Instead, it is assumed that the existing level of donations will be maintained to allow the bottom line of the projections to be the *additional* amount required from Tartu College, private and government sources to enable the Museum to break even on operations. ***Therefore \$127,900 in existing donations revenue is used for each year projected.***

5.2.11 Existing Financial Support from Tartu College

The primary funder of the Estonian Studies Centre (ESC) is Tartu College. This will continue to be the case with implementation of the Estonian Canadian Museum and Archives (VEMU). Over the period from 2016-2018 the cash amount allocated to support the ESC averaged \$168,900 per year. Since this amount has grown annually, we have used the **\$190,000** figure for 2018 as the base level. For the purposes of these projections we have assumed that this amount will be maintained for each year projected. This will allow the bottom line of the projections to be the additional amount required from Tartu College, private and government sources for the Museum to break even on operations.

5.3 Projected Operating Expenses

The categories of projected operating expenses projected for the Estonian Canadian Museum and Archives (VEMU) are:

- Salaries, Wages and Benefits;
- Occupancy Costs;
- Exhibitions, Programs and Events Costs;
- Archives and Collections Care;
- General and Administrative;
- Marketing;
- Retail Cost of Goods Sold.

The expense projections build upon a base level of figures for the Estonian Studies Centre.

5.3.1 Salaries, Wages and Benefits

It is almost always the case that the largest operating cost of any museum-related institution is staffing, generally accounting for 40-60% of the total operating budget.

The existing Estonian Studies Centre has a current staff of 2.5 full-time equivalent (FTE) personnel at a total cost for salaries and wages of about \$156,800. Since staff costs tend to increase above the prevailing rate of inflation, we have increased these costs at opening to a rounded \$160,000. Supplementing those positions (full-time Director/Curator and Collections and Program Supervisor and a part time Events Manager) are additional positions shown on the following table. Some positions are new and designated as paid by the Museum and others are allocations of time of existing Tartu College staff to be paid by the College. Salaries and wages for each new position are shown on the following table but not shown for existing staff because of confidentiality reasons.

It is assumed that salaries and wages will increase at a rate of 0.5% above whatever the prevailing rate of inflation is. Benefits average 18% of salaries and wages. The staffing cost projections are follows.

| Staffing Costs | Full-Time Equivalent (FTE) | Salaries/ Wages per FTE at Opening | Year 1 | Year 2 | Year 3 |
|---|-----------------------------------|---|------------------|------------------|------------------|
| Existing Staff of Estonian Studies Centre | | | | | |
| Total Salaries, Wages and Benefits | 2.50 | \$160,000 | \$160,000 | \$160,800 | \$161,604 |
| Museum Staff - Paid by Museum | | | | | |
| Collections and Program Supervisor | 1.00 | \$55,000 | \$55,000 | \$55,275 | \$55,551 |
| Information/Admissions/Retail | 1.20 | \$35,000 | \$42,000 | \$42,210 | \$42,421 |
| Rentals/Events | 0.25 | \$38,500 | \$9,625 | \$9,673 | \$9,721 |
| Sub- Total - Additional Salaries and Wages | 2.45 | | \$106,625 | \$107,158 | \$107,694 |
| Additional Allocation of Staff of Tartu College | | | | | |
| Housekeeping | 1.00 | | | | |
| Rentals/Events Manager | 0.20 | | | | |
| Development/Fundraising | 0.50 | | | | |
| Building Maintenance | 0.30 | | | | |
| Security/Weekend Staff | 0.20 | | | | |
| Other Staff Allocations | 0.30 | | | | |
| Sub-Total - Additional Salaries and Wages | 2.50 | \$112,200 | \$112,761 | \$113,325 | \$113,891 |
| Total Salaries and Wages | 7.45 | | \$379,386 | \$381,283 | \$383,189 |
| Total Benefits (avg. 18%) | | | \$68,289 | \$68,631 | \$68,974 |
| Total Salaries, Wages and Benefits | | | \$447,675 | \$449,914 | \$452,163 |

5.3.2 Occupancy Costs

Building occupancy costs include non-staff costs for utilities, repairs and maintenance, insurance and security systems and are generally in the range of \$6.00 to \$9.00 per gross square foot for museums. Such costs vary by climatic conditions, the age and energy efficiency of a building, the extent of the environmental control requirements, use of multi-media, and public use.

Existing occupancy costs associated with spaces occupied by the existing Estonian Studies Centre are estimated to be close to \$125,000 per year. This \$125,000 figure, in 2019 dollars, is assumed to continue into the future. The addition of the Estonian Canadian Museum and Archives (VEMU) will increase these costs. Given new energy efficient construction and limited requirements for repairs and maintenance, we estimate building occupancy costs for the 10,000 gross square foot museum at \$6.50 per gsf in Year 1 when warranties are in place, growing to \$7.25 by Year 3, as shown on the following table.

| Occupancy | Base Level | Year 1 | Year 2 | Year 3 |
|---------------------------------------|-------------------|------------------|------------------|------------------|
| Existing Estonian Studies Centre | \$125,000 | \$125,000 | \$125,000 | \$125,000 |
| Estonian Canadian Museum and Archives | | | | |
| Total Gross Square Footage | | 10,000 | 10,000 | 10,000 |
| Cost per Sq. Ft. | | \$6.50 | \$7.00 | \$7.25 |
| Museum Occupancy Costs | | \$65,000 | \$70,000 | \$72,500 |
| Total Occupancy Costs | \$125,000 | \$190,000 | \$195,000 | \$197,500 |

5.3.3 Exhibitions, Programs and Events

Over the period from 2016-2108 the Estonian Studies Centre spent an average of about \$142,200 for a combination of non-staff operating expenses associated with exhibitions, programs and events, both cultural and for fundraising purposes.

Exhibitions are currently developed by staff of the Estonian Studies Centre and low cost exhibitions are provided periodically by museums and other sources in Estonia. This will continue but on a larger scale with implementation of the Museum in 2,000 net sq. ft. of dedicated exhibition space. Temporary exhibitions will also be held periodically in the 1,800 nsf multipurpose space.

The revenue projections set out earlier include an estimate that revenues from programs and events will triple in Year 1 of the Museum and grow modestly in subsequent years. For the purposes of these projections we estimate that exhibition, programs and cultural event costs will double in Year 3 and be higher in the opening year to account for initial purchases. This leads to the following projections.

| Exhibitions, Programs and Events | Base Level | Year 1 | Year 2 | Year 3 |
|---|-------------------|---------------|---------------|---------------|
| Total Costs | \$142,200 | \$300,000 | \$290,000 | \$284,400 |

5.3.4 Archival and Collections Care

Excluding staffing costs, the Estonian Studies Centre allocations for the archives and collections care have averaged about \$10,400 over the period from 2016-2018. These costs are estimated to increase with implementation of the Museum as follows, with higher costs in the opening year to take purchases of supplies into account.

| Archives and Collections Care | Base Level | Year 1 | Year 2 | Year 3 |
|--------------------------------------|-------------------|---------------|---------------|---------------|
| Total Costs | \$10,400 | \$20,000 | \$17,000 | \$17,000 |

5.3.5 General and Administrative

These costs exclude staffing and vary by institution but generally include office and related supplies, equipment, mailing, printing, telephone, travel, conferences, volunteer perquisites, professional services, the web site, dues and subscriptions, credit card fees,

entertainment, and other items that do not fit into the other expense categories. Some of these costs are absorbed by Tartu College.

The financial statements of the Estonian Studies Centre for 2017 and 2018 indicate that these costs are in two expenditure categories – office and general and professional fees. The financial statement for 2016 also includes computer and website fees. When combined these costs averaged about \$24,700 over the period from 2016-2018. That is about 13% of staffing costs and in a common 10-15% range.

For the purposes of these projections, it is assumed that general and administrative costs at 13% of staffing costs will be applicable in Years 2 and 3, but with purchases of supplies more likely in the opening year we have assumed 14% that year. These estimates and assumptions lead to the following projections.

| General and Administrative | Base Level | Year 1 | Year 2 | Year 3 |
|-----------------------------------|-------------------|---------------|---------------|---------------|
| Total Costs | \$24,700 | \$62,675 | \$58,489 | \$58,781 |

5.3.6 Marketing

The financial statements for the Estonian Studies Centre over the period from 2016-2018 indicate an average annual expenditure of about \$28,500 for “program advertising.” While free admission is a marketing tool in itself the new Estonian Canadian Museum and Archives (VEMU) will require more expenditures on advertising, promotion and social media. We estimate the need for these costs to increase substantially with higher costs in Year 1 associated with a grand opening celebration. This leads to the following projections.

| Marketing | Base Level | Year 1 | Year 2 | Year 3 |
|------------------|-------------------|---------------|---------------|---------------|
| Total Costs | \$28,500 | \$70,000 | \$60,000 | \$60,000 |

5.3.7 Retail Cost of Goods Sold

The retail cost of goods sold is usually between 50% and 60% of retail sales. We have estimated these costs at 55%, as reflected in the following table.

| Retail Cost of Goods Sold | Base Level | Year 1 | Year 2 | Year 3 |
|----------------------------------|-------------------|---------------|---------------|---------------|
| Total Costs | \$0 | \$12,375 | \$11,253 | \$10,973 |

5.4 Summary of Attendance and Financial Projections

The following table summarizes our projections of attendance, operating revenues and expenses for the Estonian Canadian Museum and Archives (VEMU) for the opening three years of operation, with Year 3 a stabilized year generally representative of subsequent years of operation.

Based on the analyses and assumptions in this report, we project that attendance will stabilize at 21,000 annual visitors, and will be higher in the opening year at 25,000.

We also project that the operating budget for the Estonian Studies Centre, which will govern the Museum, will increase from a base level about \$491,000 to a range of \$1.1 million with implementation of the new Museum. Revenues will grow with more income from rentals, retail, fundraising events and other earned income sources as well as an endowment to support operations.

The projections also assume that base levels of funding support from Tartu College and donations will be maintained and that Tartu College will continue to absorb building occupancy costs and pay for part of the Museum's staffing costs, as it does with the existing Estonian Studies Centre.

The bottom line of the projections indicate the combined annual additional amounts required from Tartu College and donations, largely from within the Estonian community and from Estonia and government sources in Canada, will be in the range of \$243,000 to \$270,000. The Boards of Tartu College and the Estonian Studies Centre will determine whether these additional amounts are achievable in the context of a new Estonian Canadian Museum and Archives (VEMU) that will better enable the mission of the Estonian Studies Centre to “advance the cultural heritage of Estonian Canadians” to be achieved.

| Summary of Attendance, Operating Revenue and Expense Projections | | | | | Base Level | Year 1 | Year 2 | Year 3 |
|--|------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|---------------|
| | | | | | Level % | % | % | % |
| Annual Attendance | 3,900 | 25,000 | 22,000 | 21,000 | | | | |
| Projected Operating Revenues | | | | | | | | |
| Admissions by Donation for Exhibitions | \$500 | \$26,250 | \$23,100 | \$22,050 | | | | |
| Cultural Programs and Events | \$16,500 | \$49,500 | \$52,000 | \$55,000 | 3.4% | 4.5% | 4.8% | 5.1% |
| Facility Rentals | \$0 | \$32,000 | \$35,475 | \$38,250 | 0.0% | 2.9% | 3.3% | 3.5% |
| Retail Sales | \$0 | \$22,500 | \$20,460 | \$19,950 | 0.0% | 2.0% | 1.9% | 1.8% |
| Membership Programs | \$5,400 | \$17,900 | \$16,950 | \$16,400 | 1.1% | 1.6% | 1.6% | 1.5% |
| Fundraising Events (net) | \$10,600 | \$25,000 | \$22,000 | \$21,200 | 2.2% | 2.3% | 2.0% | 2.0% |
| Other Earned Income | \$12,500 | \$15,000 | \$17,000 | \$20,000 | 2.5% | 1.4% | 1.6% | 1.9% |
| Endowment | \$0 | \$45,000 | \$45,000 | \$45,000 | 0.0% | 4.1% | 4.2% | 4.2% |
| Existing Donations | \$127,900 | \$127,900 | \$127,900 | \$127,900 | 26.1% | 11.6% | 11.8% | 11.8% |
| Existing ESC Staff Costs Paid by Tartu College | \$156,800 | \$156,800 | \$156,800 | \$156,800 | 31.9% | 14.2% | 14.5% | 14.5% |
| Existing Occupancy Costs Paid by Tartu College | \$125,000 | \$125,000 | \$125,000 | \$125,000 | 25.5% | 11.3% | 11.6% | 11.6% |
| Existing Financial Support from Tartu College | \$190,000 | \$190,000 | \$190,000 | \$190,000 | 38.7% | 17.2% | 17.6% | 17.6% |
| Total Revenue Projected | \$645,200 | \$832,850 | \$831,685 | \$837,550 | 128.0% | 68.7% | 69.9% | 70.4% |
| Projected Operating Expenses | | | | | | | | |
| Salaries, Wages, Benefits | \$160,000 | \$447,675 | \$449,914 | \$452,163 | 32.6% | 40.6% | 41.6% | 41.8% |
| Occupancy | \$125,000 | \$190,000 | \$195,000 | \$197,500 | 25.5% | 17.2% | 18.0% | 18.3% |
| Exhibitions, Programs and Events | \$142,200 | \$300,000 | \$290,000 | \$284,400 | 29.0% | 27.2% | 26.8% | 26.3% |
| Collections Care | \$10,400 | \$20,000 | \$17,000 | \$17,000 | 2.1% | 1.8% | 1.6% | 1.6% |
| General and Administrative | \$24,700 | \$62,675 | \$58,489 | \$58,781 | 5.0% | 5.7% | 5.4% | 5.4% |
| Marketing | \$28,500 | \$70,000 | \$60,000 | \$60,000 | 5.8% | 6.3% | 5.5% | 5.6% |
| Retail Cost of Goods Sold | \$0 | \$12,375 | \$11,253 | \$10,973 | 0.0% | 1.1% | 1.0% | 1.0% |
| Total Expenses | \$490,800 | \$1,102,725 | \$1,081,656 | \$1,080,817 | 100.0% | 100.0% | 100.0% | 100.0% |
| Amount Required from Additional Tartu College, Private and Government Support to Break Even on Operations | | | | | | | | |
| | \$154,400 | (\$269,875) | (\$249,971) | (\$243,267) | | -31.3% | -30.1% | -29.6% |

Appendix A:

Acknowledgements

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Workshop Participants:

- Peeter Einola, Director, Vice President, Tartu College, Director, President, Chair of Estonian Studies Foundation
- Kadi Käis, Board member, Vice-President, Estonian Studies Centre
- Linda Karuks, General Manager, Tartu College, Treasurer, Estonian Studies Centre
- Alar Kongats, Architect
- Ann Liivandi, Textiles and Costumes Specialist, Royal Ontario Museum
- Linda Lokk, Director, Estonian Studies Centre
- Marika Mayfield, Programs Coordinator, Estonian Studies Centre
- Jaan Meri, Board Chair, Tartu College and Estonian Studies Centre
- Piret Noorhani, Chief Archivist, Estonian Studies Centre
- Anne Õsso, Director, Tartu College and Estonian Studies Centre
- Taavi Tamtik, Tartu College, Building Manager
- Tõnu Tõsine, Board member, Tartu College
- Ellen Valter, Chair, International Estonian Centre
- Mai-Liis Veinberg, Finance Manager, Tartu College and Estonian Studies Centre

External Interviews

- Stanley Balzekas Jr., Owner, Balzekas Museum of Lithuanian Culture, Chicago
- Lilita Bergs, Volunteer Manager, Latvian Museum, Rockville Maryland
- Dani Breen, Manager, Lithuanian Museum-Archives Canada
- Daria Diakowsky, Co-President and Exhibits Convener, Ukrainian Museum of Canada Ontario Branch
- Tamara Ivanochko, Administrator, Ukrainian Museum of Canada Ontario Branch
- Bruce Karstadt, President and CEO, Swedish American Institute
- Andres Kasekamp, Chair of Estonian Studies, University of Toronto
- Heather Kelly, Founder/Director, Bloor Street Culture Corridor
- Sheila Knox, Acting Director, Bata Shoe Museum
- Marcus Kolga, Chairman, Estonian Central Council
- Monika Kolga, Principal, Toronto Estonian School
- Eric Nelson, Executive Director, CEO, Nordic Museum, Seattle

Appendix B: Planning Principles and Design Criteria

This appendix to the report specifies planning principles and technical performance recommendations (or design criteria) that should be achieved for various building systems and conditions. It considers all areas of the museum, with a particular focus on spaces which contain collections. Areas of emphasis include operational safety and environmental requirements, such as temperature, humidity and lighting levels etc.

The intent of this section is to make recommendations based on museum best-practice for international institutions. It is noted that the concepts and performance specifications are preliminary recommendation based, and likely to evolve over the course of the planning and design process, as greater understanding of the building and its functions is developed.

Access and Circulation

Collections access doorways and corridors and collection freight elevator openings should be sized to easily accommodate movement of the crated 3D Design Object, the largest collections object being frequently transferred along the same route of travel, with wider openings for ease of movement at turns.

It is not known at this time what the largest object is, but it should be specified in advance of design.

Acoustics

In general, noise levels should neither be so low that visitors feel inhibited, nor so high as to be disturbing. The basic goals of the acoustical design are to:

- Provide an acoustically comfortable environment inside the Museum by maintaining noise and vibration levels within acceptable limits. For example, noise levels should neither be so low that visitors feel inhibited, nor too high as to be disturbing. This is a particularly important issue for the Estonian Canadian Museum and Archives (VEMU) because of proximity to the subway system.
- Minimize adverse noise and vibration impact to and from outside the Museum by controlling the transmission of noise and vibration to adjacent properties.

- Provide noise and vibration control consistent with economic constraints and appropriate technology.

Adjacencies

Incoming collections routes should be without steps, and preferably without ramps or turns, from the Collection Loading areas through all Non-Public Gallery support spaces which include the Exhibition Workshop, Temporary Exhibits (Transit) and Collection Storage, and Gallery and Exhibit Spaces. A direct linear route is ideal, as routes with turns require large turning radii and therefore larger corridors. The circulation route should not overlap with public spaces or with non-collection supplies and garbage. Collections access doorways and corridors and collection freight elevator openings should be sized to accommodate the crated 3D Design Object, the largest collections object being transferred.

Collections areas should not be adjacent to mechanical rooms or have any overhead pipes with fluids, with the exception of sprinklers.

Emergency showers and eyewash stations, if needed, should be provided near appropriate workstations.

Air Circulation

Air circulation is critical to both human comfort and the preservation of collections. Air circulation is central to maintaining stable environmental conditions for the collections, and the air change rate will have a major impact on energy consumption. An air lock system that includes vestibules at building entrances will contribute to efficiency and stable conditions.

Carbon dioxide (CO₂) sensor-controlled outside air dampers are recommended in all air-conditioning units. Where necessary, the dampers must also respond to a static pressure sensor to take account of varying exhaust loads so as to maintain a neutral to positive air pressure in the building during the spring, summer, and fall. During the winter, the building should be under neutral to slightly negative pressure.

Key considerations when establishing air change criteria include:

- Ensuring enough air circulation to maintain tight temperature and humidity standards
- Allowing proper air circulation to prevent mold or other biological growth on walls or other cavities
- Providing the minimum quantity of fresh air required so as to increase the efficiency and lifespan of mechanical equipment
- Flexibility for adjustment over time as space uses evolve and users can optimize systems to improve performance and reduce operational costs

In all collections and archive spaces, air circulation is vital to both achieve a stable level of relative humidity (RH) and suppress mold growth. For this reason, it is recommended that fans be capable of operation during power outages via emergency power outlets in galleries and collections areas. Variable air flow rates optimize the air flow in both collections areas and non-collections areas, such as office spaces. If such a strategy is adopted, carbon dioxide sensors may be useful to gauge system requirements.

Air-Conditioning

Chapter 23, “Museums, Galleries, Archives, and Libraries,” of the ASHRAE Handbook—HVAC Applications (2011) provides a framework for specifying classes of control for temperature and relative humidity for collections. Of particular importance is Table 4: Temperature and Relative Humidity Specifications for Museums, Library, and Archival Collections below.

| Type | Set Point or Annual Average | Maximum Fluctuations and Gradients in Controlled Spaces | | | Collection Risks and Benefits | |
|--|--|---|---|---|--|--|
| | | Class of Control | Short Fluctuations plus Space Gradients | Season Adjustments in System Set Point | | |
| General Museums, Art Galleries, and Archives | 50% rh (or historic annual average for permanent collections) Temperature set between 59 and 77°F (15-25°C) Note: Rooms intended for loan exhibitions must handle set point specified in loan agreement, typically 50% RH, 70°F (21°C), but sometimes 55% or 60% RH. | AA Precision Control, no seasonal changes | +5% RH, +4°F (2.2°C) | Relative humidity no change Up 9°F, down 9°F | No risk of mechanical damage to most artifacts and paintings. Some metals and minerals may degrade if 50% rh exceeds a critical relative humidity. Chemically unstable objects unusable within decades. | |
| | | A Precision control, some gradients or season changes, not both | +5% RH, +4°F (2.2°C) | Up 10% RH, down 10% RH Up 9°F, down 18°F | Small risk of mechanical damage to high vulnerability artifacts; no mechanical risk to most artifacts, paintings, photographs, and books. Chemically unstable objects unusable within decades. | |
| | | | +10% RH, +4°F (2.2°C) | RH no change Up 9°F, down 18°F | | |
| | | B Precision control, some gradients plus winter temperature setback | +10% RH, +9°F (5°C) | Up 10%, down 10% rh Up 18°F, but not above 86°F Down as low as necessary to maintain RH control | Moderate risk of mechanical damage to high-vulnerability artifacts; tiny risk to most paintings, most photographs, some artifacts, some books; no risk to many artifacts and most books. Chemically unstable objects unusable within decades, less if routinely 86°F (30°C), but cold winter periods double life. | |
| | | C Prevent all high-risk extremes | With 25 to 75% RH year-round Temperature rarely over 86°F (30°C), usually below 77°F (25°C) | | | High risk of mechanical damage to high- vulnerability artifacts; moderate risk to most paintings, most photographs, some artifacts, some books; tiny risk to many artifacts and most books. Chemically unstable objects unusable within decades, less if routinely at 86°F (30°C), but cold winter periods double life. |
| | | D Prevent dampness | Reliably below 75% | | | High risk of sudden or cumulative mechanical damage to most artifacts and paintings because of low humidity fracture but avoids high-humidity delamination and deformations, especially in veneers, paintings, paper, and photographs. Mold growth and rapid corrosion avoided. Chemically unstable objects unusable within decades, less if routinely 86°F (30°C), |
| Archives, Libraries | Cold Store: -4°F (- 20°C) 40% RH | +10% RH +4°F (2.2°C) | | | Chemically unstable objects usable for millennia. Relative humidity fluctuations under one month do not affect most properly packaged records at these temperatures (time out of storage becomes lifetime determinant). | |
| Storing chemically unstable collections | Cold Store: 50°F (10°C) 30 to 50% RH | Even if achieved only during winter setback, this is a set advantage to such collections, as long as damp is not incurred. | | | Chemically unstable objects usable for a century or more. Such books and papers tend to have low mechanical vulnerability to fluctuations. | |
| Special Metal Collections | Dry room: 0 to 30% RH | Relative humidity not to exceed some critical value, typically 30% RH | | | | |

Alarms

Alarms are critical in alerting staff and authorities of potential incidents. Several different types of alarms are recommended:

- **Fire Alarms and Detection:** Both heat and smoke detectors should be present in the building. Heat detectors should only be used in areas where smoke detectors may be subject to false alarms, such as food prep areas. Smoke detectors should be used in all non-collections spaces as well as in collections spaces. The fire alarm and detection system should be monitored 24 hours a day, 365 days a year, with appropriate links to responding agencies.
- **Heat detectors (addressable)** to be provided only where smoke detectors may be susceptible to false alarms, as in food preparation areas.
- **Panic Alarms:** Panic alarms, both portable and hardwired, are to be provided at specific locations, such as the retail sales counters, the ticket counters, and the security desk, as well as carried by security personnel on their rounds and monitored on and off site.
- **Security Alarms:** Frequently, the building design will influence where and how many security alarms are necessary. Verified (dual technology) passive infrared motion detectors or DAVID (digitally analyzed video intrusion detection) or a similar system is beneficial in most spaces, with magnetic switches and glass breakage detectors on perimeter openings and specific internal doors, all connected to an emergency power supply and monitored on site, with direct (not through switchboard) telephone connections to a policing service with a maximum five-minute response time.
- **Temperature Alarms:** Temperature sensors are to be provided in cool or cold rooms containing collections and/or each refrigerator or freezer containing artifacts or specimens, with each sensor monitored by the building management system (BMS).
- **Water Alarms:** As per code, water flow in a sprinkler system will annunciate at the fire alarm panel. In addition, water detectors (sensor tape, stand type, and sump attachment) monitored by the BMS are to be provided in sensitive collections areas or other areas at risk of flooding.
- **Emergency Power to Alarms:** All alarms should be connected to an emergency power supply (UPS plus emergency generator) with the capacity to provide monitoring for 72 hours in addition to operating the alarms for five minutes.

Ceilings

Collections items and related exhibition support equipment can be suspended from ceilings. Therefore, ceiling specifications should be taken into consideration during the facility design phase.

Skylights pose risks to collections and are generally discouraged over collections areas. Most collections materials can deteriorate with direct or indirect exposure to natural light. Furthermore, skylights present the potential—indeed, the high likelihood—for leakage and failure.

Gallery ceiling beams should permit the hanging of three-dimensional objects and/or information displays. It is recommended that each hanger be capable of holding at least 200 pounds, and hanging points should be well distributed throughout galleries and other areas likely to feature collections items or artwork. Suspension capability of ceiling beams may be a minimum of 4,000 pounds per gallery; however, the exact capacity should be determined in consultation with an engineer based on the weight of the object to be suspended. As with the display of any object, a specialist in hanging collections items should be consulted.

Gallery ceilings are usually 'open' to the base building super-structure so that maximum flexibility is maintained with minimum disruptions and expense when exhibits are changed. In areas where collections and exhibits are present (movement corridors, storage and workrooms, galleries) an open ceiling is preferred so that potential building systems problems can be readily identified and remedied.

Doors and Openings

Doors should be selected carefully both to ensure a positive visitor experience and to mitigate risks to collections, such as burglary or fire. All regularly used public and staff entrances should be of a vestibule design.

All doors must be fire-rated to code, with the exception of the Temporary (Transit) and Collection Storage areas, which require additional fire protection for a minimum two-hour fire rating. The doors should match the fire rating of the fire dampers, walls, roof, and floor to mitigate the risk of fire.

Elevators

Elevators will be required to access public, staff, and service areas as well as collections and exhibits on all building levels. It is recommended that an elevator also provide access to any mechanical areas for the movement of supplies such as air filters and chemicals and replacement parts such as fan motors.

Museum best-practice recommends there be a dedicated collection freight elevator, with interior dimensions sufficiently sized to accommodate the crated 3D Design Object and personnel needed to accompany the object to its final destination, plus moving equipment. It is recommended that this collections freight elevator have a roofed cab since elevators require mechanical parts that must be greased or oiled above the elevator cab, which could endanger uncrated collections.

Additionally, doors may need to open on both ends or sides. It is recommended that the elevator door be located on the long side of the elevator. Therefore the widest possible door could be used and would facilitate the movement of objects onto and off the elevator.

If a single, shared elevator is utilized for both collections and visitors, protocols to accommodate collection and visitor movement will need to be developed during elevator down-time. Additionally cleaning protocols should be adopted to ensure the elevator is clean when in use for collections movement.

Fenestration

The use of fenestration (windows) is strongly discouraged in galleries and collections areas, as daylight poses myriad risks to collections. These include water leaks, reduced insulation, criminal intrusion, and damaging light levels. It is strongly recommended that all windows where collections are held address the following:

- Have control and/or blackout capability to meet low-level indoor lighting levels
- Limit UV levels to a maximum of 10 µW/lumen and are fritted to limit maximum light levels
- Are triple-glazed with high thermal value
- Have frames that are thermally broken and insulated for both energy efficiency and extreme weather
- Be resistant to risks that include criminal intrusion and flying debris from natural disasters
- Be carefully designed and inspected during construction to ensure that standards are carefully adhered to

Fire Suppression

Fire presents a potentially catastrophic threat to people, collections, and buildings. Even a small fire can quickly pose a risk to human health and spread to collections areas. Large collections storage areas are particularly vulnerable to the risk of fire.

- Fire Extinguishers: Portable carbon dioxide (CO₂) extinguishers with a minimum charge of 7 pounds of extinguishant for Class B (flammable liquids and grease) and Class C (electrical) fires are recommended. Pressurized water extinguishers with a minimum of 2.5 gallons of water for Class A (wood, paper, textiles, and ordinary combustibles) fires are recommended. Mobile mist units may be investigated for use in collections areas.
- Fire Rating: All finishes are to be fire resistant, with low smoke and flame spread numbers. Code fire rating for life safety for structures is required throughout. In addition, the Temporary/Collection storage should have a minimum two-hour fire rating. A two-hour fire rating should provide the time necessary to prevent the spread of fire from non-collections to collections areas.
- Sprinkler System: must be provided. There are many options when selecting sprinkler systems—wet or dry pipe; pre-action or regular systems; sprinkler, mist, deluge, or waterless suppression.

A water-based fire suppression system is typically the preferred system to be installed. Wet-pipe sprinklers are typically preferred to dry pipe. This means that water will be present in the pipes of a suppression system during normal conditions.

Floors

Live load capacity may be to code in non-collections zones, but should be at least 150 pounds per square foot in collections areas. For double height gallery spaces 250 pounds per square foot is recommended. In general, the point load capacity for collections areas should be at least 1 short ton (10 kN). All of these numbers may vary depending on the weight of collections and storage systems.

Besides meeting the floor loading requirement, the floors must mitigate vibrations that would cause objects to vibrate and/or move, due to either internal sources, such as people walking, equipment being rolled, or operating equipment, or external sources, such as traffic or construction.

Humidification/Dehumidification

Humidity may be the most significant environmental factor when it comes to preventing damage to collections items. Too high a relative humidity (RH) level will encourage biological attack such as mold growth and chemical or physical instability; and too great a fluctuation will create a high risk of dimensional instability such as mechanical damage to collections objects, particularly vulnerable objects.

Unlike most other applications, HVAC design for collections buildings is more concerned with humidity control than temperature control. Maintaining widely different conditions in zones using the same air handler can be difficult to achieve.

Temperature and relative humidity set points need to be balanced. In a warm, humid environment, it requires a great deal of energy to maintain a temperature at the moderate to slightly cool range of human comfort at a low- to mid-RH range of 35–50% RH. Conversely, in a cold climate, it requires a great deal of energy to maintain a temperature at the mid to high range of human comfort at a mid-RH range of 50% RH. Seasonal adjustments are therefore a useful tool for finding a set-point range that meets the needs of people, collections, and budget. Set points may be varied slightly each month in the spring, and varied in comparable stages in the opposite direction in the fall. The environmental set points for collections areas should be determined in consultation with the cultural facility staff, conservator, preservation architect, and building engineer. If the institution would like to be able to accept international loan and high level traveling exhibitions, the set point would likely be 50% RH with a short fluctuation of + 5%. While systems would be designed to these tight standards, the building would have the flexibility to be operated with greater variation to realize operational efficiency yet allow for tight controls when called on.

To achieve the RH set points, steam-to-steam humidifiers, electric element stainless steel humidifiers, or standard humidifiers fed steam from a steam-to-steam heat exchanger or from a clean steam generator should be used. Consideration could be given to using reverse osmosis–treated water in the steam humidifiers to ensure no carryover of chemicals with the steam.

Lighting: Gallery and Exhibition Spaces

Museum light level specifications are based on the lowest amount of light necessary for a viewer to appreciate an object on display. Anything above this level is considered to cause unjustifiable damage. Gallery lighting must balance visible-accessibility objectives (which favor brighter conditions for visitors with weaker eyesight) with the need to minimize collections damage (which favors lower lighting conditions).

Three-circuit light track, with one circuit undimmed as a power source, the other two circuits on dimmers for direct lighting, is recommended in galleries, or power boxes on a 12-by-12 foot ceiling grid spacing could be used to power lighting and exhibit systems.

Specific gallery lighting requirements will need to be determined during the detailed gallery design process.

Walls

It is essential that in all collections areas, walls be designed to contain the specified environment, to be easily cleaned, and to resist pest infestations. Walls in collections spaces including collections and transit storage, shipping/receiving, crating/uncrating, isolation, and freight elevator shaft and corridors should be concrete or plaster; surfaces shall be sealed or painted to prevent dusting, even in concealed locations, for example, above suspended ceilings if installed.

Public collection walls are to be repeatedly nailable, painted 5/8-inch fire-rated gypsum wallboard over 5/8- to 3/4-inch plywood on studs, separate from the exterior structural wall and capable of supporting 440 pounds. The stud space could be enlarged to provide room for such components such as HVAC ducts, electrical wiring, sprinkler risers, circuit breaker panels, and electrical outlets. The return air openings for the HVAC system should be located at the bottom of the nailable wall in the toe space. Some nailable walls may be located at least 3 feet from the structural wall to allow the installation of video monitors and so on.

Public collection walls are to be seamless, with no trim, and with devices such as security sensors, CCTV cameras, exit signs, fire alarm strobes and sounders, grouped together over doorways and in the corners of the room as appropriate. This will help maximize on display wall space and not distract from exhibitions.

If a public collection space contains an exterior wall, and if the stand-off secondary wall is not used as a low-level air return system, then it will need to be ventilated top and bottom so that both sides of the hanging face of the stand-off wall are at room conditions and not cooler (and therefore more humid) or hotter (and therefore drier) than room conditions.

Offices and Public Non-Gallery spaces may be painted drywall, as is typically specified for office finishes. Service areas should be finished for utility and ease of cleaning.