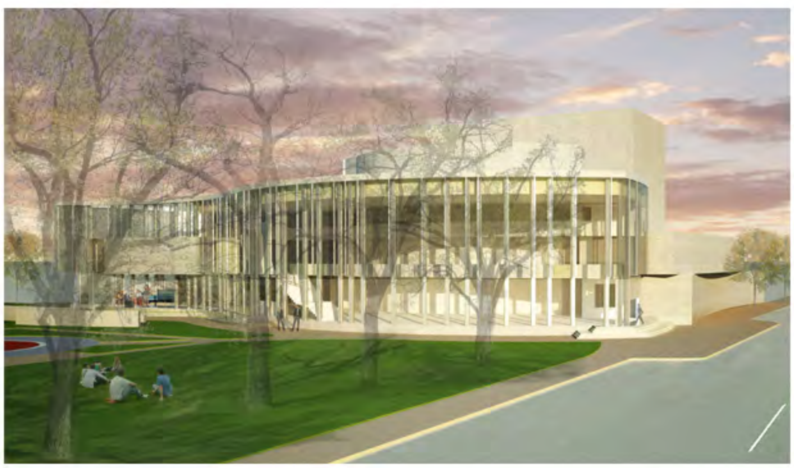
LETHBRIDGE PERFORMING ARTS CENTRE STUDY

May 5, 2010



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Lethbridge Performing Arts Centre

Executive Summary

21 April 2010

In October 2009, the city of Lethbridge hired this design team to create a study for a new Lethbridge Performing Arts Centre. Over the course of several months, the design team met with members of the local arts community, and heard their concerns. The study identified a deep need in the performing arts community of the city of Lethbridge: existing facilities are inadequate for today's performance types in both venue design and availability.

The best way to alleviate this issue is to change our idea of what the performing arts in Lethbridge could be. We see a future where many different types of users (music, theatre, and dance) use the same space that draws large touring productions into the community, so we created a design that meets several basic needs:

- A building that handles not only the performance aspects, but also all of the support required
- Multi-purpose in nature to accommodate many performance types
- Flexible design for easy turn-around, keeping operational costs to a minimum

The program

The building program utilizes best practices from similar facilities all over North America. When the public arrives, entry is into a grand lobby large enough to generate its own revenue stream, including public amenities such as bars, concessions, restrooms, a box office, and a gift shop. A modest food service area allows outside caterers to warm and prep their food for a party or event. A patrons' lounge is incorporated into the design to allow for breakout events and donor parties. While much of the focus is placed on the performance halls, various spaces throughout the facility will be designed to allow for informal gatherings, lectures, or performances, maximizing the functionality of the entire building. The lobby may be a place for impromptu recitals, open mic nights, or pre-concert lectures. The patron lounge may host social events, meetings, presentations, rehearsals, or intimate concerts.

The performance venues are categorized as large (1250 seats) and small (250 seats). The large hall will present events as varied as music (jazz, pop, classical), theatre (musicals, drama) and dance (ballet, modern, folk). With some acoustic tweaking, a modest film component can be accommodated, too. The small hall was designed to be both a performance space (small theatre, music) as well as a rehearsal space by clearing the floor of audience seating to create an open floor plan. A side benefit is that a flat floor space serves parties and rentals equally well.

Back of house spaces, too many in number to mention in detail here, include dressing rooms for up to 70 performers, an orchestra pit for up to 47 musicians, workshops, storage rooms, wardrobe run rooms, a green room (performer assembly), crew rooms, a loading dock, and restrooms. In keeping with the desire to use the building to its fullest, dressing and warm-up rooms can also provide areas for small group rehearsals or sectional breakouts when the performance spaces don't require the use of the dressing rooms.

The building will have the modest level of administration support space typical to a facility of this size, as well as building services such as loading and maintenance.

Multi-purpose design

It is becoming more and more common for communities to provide performance venues for the types of performing arts being developed locally. Current economic models rarely support the spending that would allow the construction of a multiple purpose-built facilities, such as a separate drama theatre, concert hall, and film screening room. To satisfy the widest range of uses, and to keep the building active and alive on as many successive nights as possible, the theatres themselves need to be able to be transformed to contain all of the art forms that perform within. The Lethbridge Performing Arts Centre will do just that.

To manage this, the design team used a few tried and true methods to allow these rooms to provide the best possible performance space for each user type. Below are just a few examples of how flexibility driven by performance needs fits into the multipurpose model.

1250-seat theatre

The basic form of this space is oriented to support music performance, from the rake of the seating to the general room proportions. Within this form, wall and ceiling geometry will be acoustically shaped to support a wide range of use – providing clarity and intimacy of sound for a solo actor to a large instrumental and choral ensemble. Acoustic geometry will also emphasize performer communication – it's vital for musicians and actors to hear the room respond to their performance and to be able to communicate within the orchestra pit and between pit and stage performers. In addition, the room utilizes a design that includes two balconies and a main floor. This is done for several reasons. First, it allows a greater number of audience patrons to be closer to the stage. (It's more efficient to vertically stack the viewers.) Second, if a performance does not sell out, this gives management the ability to "close off" a balcony and, with judicious use of architectural house lighting, make the room feel a little smaller, negating the cavernous feel of a small audience in a large space. Last, this design creates several "front rows," allowing the theatre management to sell more premium seats.

Room volume will be sufficient to provide the strong, clear reverberation essential for most symphonic and choral repertoire and important for creating dramatic impact for theatrical presentations. Key to the room's flexibility, operable banners and curtains hung within the audience seating volume can incrementally reduce reverberation or dampen reflection, depending on the needs of the production onstage. These deployable adjustable acoustics will be easy to operate. A variety of system presets will tailor the theatre's sound – from moderate reverberation control for recital and chamber music presentations, opera, dramatic theatre, and some dance productions to significant room control for popular music concerts, heavily amplified dance, musical theatre, and film presentations.

The orchestra pit lift is a motorized lift mechanism and steel-framed lift table located at the front edge of the stage. Orchestra lifts are incorporated in this design to allow for quick configuration changes and performance platform flexibility. At the touch of a button, the floor level can be lowered to put an orchestra in the pit for a touring Broadway-style show, raised up to stage level to extend the stage forward, or put at main floor level for additional audience seating. With the stage edge moved forward, an orchestra shell of moveable wall towers and flown ceiling panels (steel-framed units with rigid, composite, sound-reflecting surfaces) will be provided to create a single acoustic room for music performance. In addition, patrons can view the concert from audience seating in the towers surrounding the musical ensemble. The effect will be to place performers, such as the Lethbridge Symphony or Star Singers, in space shared with the audience, creating a single room concert hall within this multipurpose venue.

Once the shell is removed, the room transforms into a proscenium theatre with a stage and flytower sized to accommodate touring and local productions. The portable towers and ceiling panels can be reconfigured in relatively short time by an experienced stage crew, allowing for an afternoon rehearsal of a music ensemble and an evening performance of *Phantom of the Opera*, for example.

The quality of quiet is essential in giving performers full freedom of expression – allowing dramatic pause to create tension or music to soar from near silence to fortissimo. This design has incorporated elements that will prevent unwanted noise from interfering with the performance experience. Mechanical systems will be designed to provide low levels of background noise. Building construction will isolate the theatre from activities within the building as well as from the exterior.

Recital / rehearsal hall

Like the larger proscenium theatre, the recital/rehearsal hall will be a multipurpose space intended to serve a variety of community functions – from lectures, parties, and rehearsals to drama, dance, and music performances.

The design of this space is oriented around ease of flexibility. Seating platforms at the main level will retract quickly to transform from tiered seating to flat floor. Additional movable platforms provide even greater flexibility of audience and stage arrangements with slightly greater turn-around time. Room shaping and finishes will support natural sound. A moderate level of reverberation is anticipated to create conditions appropriate for choral rehearsal or recital and chamber music events. A system of operable curtains or banners will be incorporated into the design of the room to control reflections, reverberation, or loudness for dramatic or amplified events as needed.

As with the main theatre, background noise control is an important consideration in the design of this room.

Flexibility

The most important factor in designing a facility like this is to ensure that changeable features are quick and efficient. Flexibility without speed and ease is likely to remain in a static condition. This is illustrated above in examples of how the performance spaces can be transformed by reconfiguring theatrical equipment. We planned for this building-wide.

Including the recital/rehearsal hall in the design provides the ability to accommodate multiple users at the same time and increases the potential for multiple revenue streams. The more events occurring in the building, the more alive the facility will be. Additionally, a larger group requiring a rehearsal venue can now stay in-house to warm up or rehearse in the smaller room before presenting on the main stage.

However, high levels of activity require attention to building planning and construction materials to insure that one group doesn’t interfere with another. The architectural organization of spaces has been arranged to separate activities, allowing easy simultaneous use of the two performance venues. This has been done not only in regard to the flow of patrons and performers, but also in terms of acoustic separation between the two halls and separate backstage facilities. Dressing rooms are designed with an appropriate level of isolation to allow small groups or individuals to warm-up or rehearse with moderate levels of privacy while not impacting the two performance facilities.

The result is that it is possible to present a preshow concert or lecture in the lobby or one of the performance spaces without impacting a separate event in the other space. While a performance is occurring in the main theatre, the smaller space can be turned around to host a party or other post-performance event with no impact to the main performance. The success of these buildings hinges on this kind of flexibility and planning.

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Performing Arts Facilities Needs Assessment

Ferrari Westwood Babits Architects

November 2009

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1. introduction

As part of a team led by Ferrari Westwood Babits Architects, Webb Management Services has been engaged by the City of Lethbridge to evaluate the need for new performance facilities. This report, addresses the basic question of whether new performing arts facilities are needed in Lethbridge based on market characteristics, the existing supply of facilities, potential uses and users, programming opportunities and the broader goals of the community.

To complete this first round of work, we:

- Interviewed over 100 individuals, which included a cross-section of representatives of regional arts and cultural organizations, facility managers, educators, funders, local business owners, City leadership and personnel.
- Surveyed members of the local arts community to understand their interest and need for new performance facilities;
- Toured existing facilities, met with facility operators and researched other venues located within the local market, paying particular attention to facility components and programs;
- Studied the size and characteristics of the market area, including existing arts audiences and population trends;
- Based on the information above, we then developed a detailed facility concept, which will be evaluated by the Steering Committee and used to advance the project.

This report summarizes our work and leads us to a series of conclusions and recommendations around the need and opportunity to develop new facilities.

We would take this opportunity to thank all of the many people to whom we spoke over the course of our work. Their input and advice has been invaluable in helping us develop a plan for new facilities that could have a profound impact on the community. We would also extend special thanks to staff of the City and to Allied Arts for their assistance in scheduling all of the interviews and tours through this data collection process.

2. study context

The City of Lethbridge is the largest city in Southern Alberta, divided by the north-south course of the Oldman River and the CPR's east-west rail line. Lethbridge is home to the only university in Southern Alberta and the City has many fine arts institutions, such as the Southern Alberta Art Gallery, New West Theatre and the Lethbridge Symphony Orchestra, and the community is firmly invested in continued support of local arts and culture.

The State of the Arts in Lethbridge

The arts community is growing and busy, with many artists, organizations and educators producing and creating in Lethbridge. There is a diverse range of performing arts groups, including professional organizations such as the Lethbridge Symphony Orchestra and New West Theatre, community organizations such as Lethbridge Musical Theatre, the Lethbridge Community Band Society and Avanti Choral Association, and arts educators, including dance studios and music teachers. The local arts council, Allied Arts Council of Lethbridge, is dedicated to preserving and enhancing the local visual and performing arts.

The Yates Centre has long been the City’s premier performing arts facility used by many groups, but technical deficiencies, size, and booking availability have begun to limit opportunities for programming and performance. The University’s facilities are well-equipped but largely inaccessible due to heavy student usage. Despite the close proximity of Calgary, a metropolitan area that regularly draws large-scale touring acts, Lethbridge does not share in these touring acts because of the City’s lack of appropriate stages and large venues. The need for a new performing arts centre was outlined in the City’s new 10-year Capital Improvement Program, which then led to the establishment of a steering committee to explore and advance these ideas. The City recognizes the role and value of the arts and culture in the community as a major contributor to quality of life issues. In parallel with this study is an effort to develop a new community arts centre, as well making improvements to the Bowman Arts Centre.

It is also critical to note the connections and collaborations between the arts and cultural community and the educational sector. The University of Lethbridge offers degrees in the visual and performing arts, and the University Conservatory offers private instruction and training. Both the Conservatory and the University are an important aspect of this study. Lethbridge College also offers extensive programs, which have grown significantly in recent years despite a lack of high-quality facilities. And local public schools such as GS Lakie Middle School and St Patricks Fine Arts Elementary School provide instruction in the performing and visual arts and produce shows in outside venues (including occasional use of the University’s venues). A percentage of University students stay in Lethbridge after completing their studies, which has also served to enrich the local arts community.

The Arts in Southern Alberta

Alberta has a thriving legacy in the performing and visual arts, and places a high value on tourism. Edmonton, Calgary and Lethbridge have excellent symphony orchestras, and several well-known theatre artists have made their start in Alberta. The major cities in Alberta have several producing theatre companies who entertain in a variety of venues. Dance is a major factor of arts and culture in Canada, and the Calgary-based Alberta Ballet is the third largest ballet company in the country. The Epcor Centre for the Performing Arts is a creative hub, as is the Jubilee Auditorium. Summer festivals are popular, especially the Edmonton Fringe Festival, the world's second largest (after Edinburgh's). Calgary and Edmonton host large Folk music festivals and annual multicultural events. Calgary is also home to Carifest, the second largest Caribbean festival in the nation, and is also famous for its Calgary Stampede, dubbed "The Greatest Outdoor Show on Earth." These cultural events in Alberta highlight the province's cultural diversity and love of entertainment.

Although Alberta has only several large notable art galleries, many small galleries showcase local artists and artisans in the major centres. Local sculptors, painters, weavers and many other artisans show original works notably featuring Canadian and northern Canadian art and crafts, many of which are in line with the western rodeo theme. Other cultural attractions in Southern Alberta include the Frank Slide Interpretive Centre, the Galt Museum & Archives, Head-Smashed-In Buffalo Jump, the Esplanade at Medicine Hat, Nikka Yuko Japanese Garden, the Royal Tyrrell Museum, to name a few. Cultural Policy is outlined in the Spirit of Alberta, which provides a framework for decision-making and a vision for the future.

The Economy

The other important contextual issue for our study is that we are completing this work in the midst of a severe and widespread recession. And though we are all hopeful that the North American economy will soon recover, there are significant challenges associated with considering major municipal investments at a time when all revenues and expenditures are being so closely scrutinized.

The approach we must take is to stress the long term value and impacts of investing in the arts and culture, while also making clear that these investments do not force the City, nor the private sector, to neglect other short-term needs and priorities. We are obliged to express a bold vision for the arts and culture in Lethbridge, but not one that compromises other community investments in an environment where every penny counts.

3. trends in cultural participation

The world of arts and culture is changing, and our recommendations around the development of new facilities in Lethbridge must embrace these trends and issues. Here we review some of the recent work around arts participation and how that influences the development and use of facilities.

National Characteristics of Performing Arts Participants

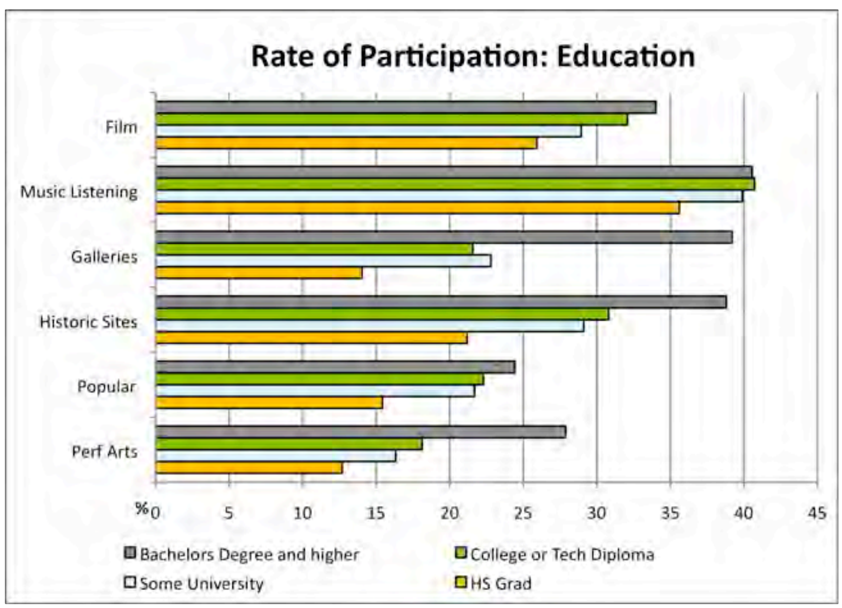
Demand for performing arts facilities starts with audiences. In order to assess the potential audience for the new performance facilities, we must understand the size, characteristics and potential of the regional market, how it compares to other markets and how the population is likely to participate in live arts and entertainment events.

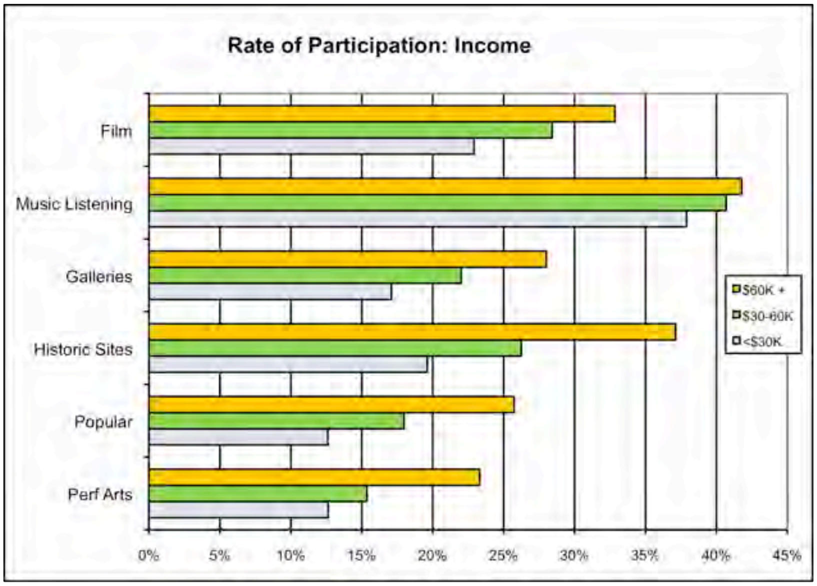
Statistics Canada ("Stat Can") conducts the General Social Survey (GSS), an annual telephone questionnaire. The GSS monitors changes and identifies emerging trends in society. The survey is given to 25,000 participants, selected at random.

Each year the survey focuses on one topic, such as leisure time use, social networking, social support, retirement, health, education and more. Cultural participation information is gathered as a subset of time use and most recently was collected from January to November 2005 as a part of GSS: Time Use (Cycle 19). Similar information has been gathered in 1986, 1992, and 1998. The 2005 GSS: Time Use also covers topics such as volunteer activities, sports participation, social capital, adult training, activity limitations and transportation.

The 2005 GSS identifies the demographic characteristics of Canadians aged 15 and over who participate in the arts, both as audience members and as active participants in classes, performing groups and more. The following narrative highlights some key findings.

- **Educational attainment and income are by far the best predictors of arts attendance.** As seen in the following charts, the propensity to attend arts events among those who have Bachelors degree and higher is far greater than for those who have finished only high school; with each advanced level of education there is an increased probability of arts attendance. The chart "Rates of Participation: Income" shows that the rate of participation increases with income levels.





- **Age** is important for certain types of cultural activity - attendance as theatre and live performance, historic sites, galleries and art museums increases with age. Age also increases the predicted probability that people will attend theatrical performances on a more regular basis.

A June 2008 report released by Stat Can, "Understanding Cultural Consumption in Canada," identified characteristics of those who participate in cultural activities. Individuals employed in the management, business, finance or administrative sector are more likely to attend a cultural activity than individuals who are unemployed or employed in the manufacturing industries. Gender is also important; women are more likely to attend events more frequently than men. The study determined that individuals living with young children were less likely to participate in cultural activities. Singles are more likely than separated or divorced people to attend theatrical performances. Further, the 2001 Survey of Household Spending showed that Canadians spent $21.3 billion on cultural goods and services in 2001, greater than spending on tobacco, alcohol and games of chances combined. Performing arts attendance is higher for those Canadians residing in larger urban centres (43%) than rural areas or small towns (33%), likely influenced by different levels of availability of performing arts activities.

Trends in Cultural Participation in Canada

There exists limited current statistical data on young adult participation in the arts in Canada. However, a report by Hill Strategies commissioned by the Canada Council for the Arts, the Department of Canadian Heritage and the Ontario Arts Council analyzes data and trends in current and historical GSS: Time Use data. The report shows that participation in the traditional performing arts (classical music, theatre, and dance) between ages 15 to 29 decreased by nearly 11% between 1992 and 1998. When the data includes pop music, participation by age group 15 to 24 jumps by 15 to 20%. Therefore, younger audiences are participating less in traditional performing arts in favor of pop music and other forms of media and entertainment.

In addition, birth rates are declining in Canada - the population under age 15 decreased by almost 2% between 1995 and 2000, the population aged 65 and over grew almost 10% during the same time period. This trend has continued in the current decade, and is expected to continue in the future. There are no guarantees that the younger, less populous age brackets will adequately replace current arts audiences.

General Trends in Cultural Participation and Facilities

Over the last several years, we have become increasingly concerned about the future of live performance and where it happens. Performance spaces have become incredibly expensive to build and sustain. Even though the case to build a theatre in a given market might be strong, the cost, complexity and effort required to bring a project to fruition are often overwhelming for community leaders who view a theatre as more of an extravagance than a necessity. And in many communities, residents (a.k.a. voters and taxpayers) look at arts facility projects with a considerable amount of skepticism.

These concerns led us to bring together a selection of performing arts facility managers for a two-day think tank in 2007. Together, we considered what these buildings might look like in twenty-five years given trends in audiences, performance artists and the economics of the performing arts industry. We discussed a range of issues and anxieties, ultimately coming to the conclusion that the field is changing, but the notion of live performance still makes sense, so there continues to be a need for performing arts facilities. Two years later, the issues and challenges of arts facilities have become more acute. The economic downturn has revealed the fragility of our sector. Undercapitalized organizations are struggling (and often failing), given a combination of reduced ticket sales and increased competition for a shrinking pool of grants and donations from both the public and private sectors.

In 1968, two New York University professors wrote a seminal text called Performing Arts—The Economic Dilemma: A study of Problems Common to Theatre, Opera, Music and Dance.[1] The central idea they put forward is that because there are no productivity gains associated with the creation of the work (it takes relatively the same amount of time and energy to prepare a performance of the Brahms Requiem today as it did 200 years ago), ever-increasing costs will force an ever-increasing reliance on fundraising to support the performing arts. It's one thing to accept that the work is not commercially viable. But to then face the prospect that the need for external support will increase each and every year for the rest of time is a bit overwhelming.

We are also concerned with the relationship between audiences and facilities. Performing arts facilities have not evolved with shifting audience expectations. While many large cultural spaces anticipate and adapt to the needs of the consumer, such as baseball stadiums, evangelical churches, and basketball arenas, most performing arts facilities are being built, programmed and operated in ways that do not serve contemporary audiences, which we see as a key factor in declining audience participation rates, particularly among younger people.

Having raised all of these red flags, we remain optimistic that there is a future for live performance, and that there are choices we can make that will lead to successful facilities. In general, we see a trend towards smaller, more flexible spaces that include high levels of food & beverage service, more technology and larger public spaces. We must make the fundamental shift away from facilities that come alive only at curtain-time towards facilities that are open and active on a 24/7 basis, having the potential to become a community destination. Facilities must come alive with a broader range of programming that goes beyond passive participation (attending a performance) to active participation (singing in the choir). And we must return to audiences a sense that they have some control over their experience, most importantly to attract younger audiences.

These trends and issues inform our thinking about new facilities in Lethbridge.

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[1] Baumol, William J., and William G. Bowen. Performing Arts—The Economic Dilemma: A study of Problems Common to Theatre, Opera, Music and Dance. Surrey: Ashgate, 1968.

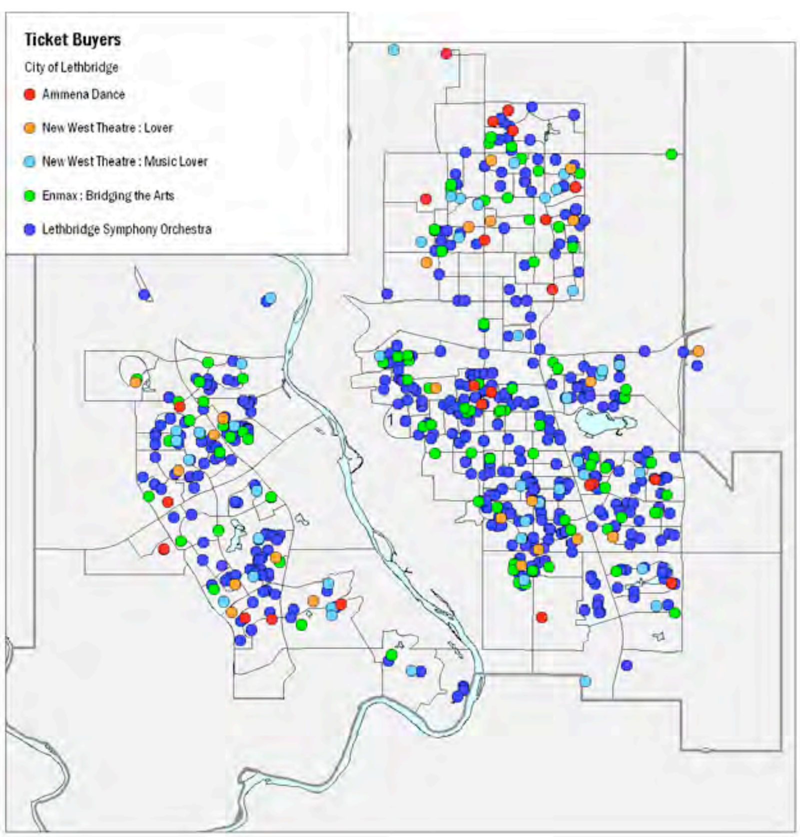
4. market assessment

Market Definition

To understand potential for audiences to attend events at new performance facilities, we assessed population data and trends in the City of the Lethbridge and the region. The market was defined using information obtained in interviews, a review of existing audiences' addresses and our own experience and knowledge as consultants working in similar communities. We have defined the market into the following two segments:

- **City of Lethbridge:** Lethbridge is the region's largest urban area and considered the hub of Southern Alberta. The City is known for its diverse economy, low labour cost, affordability and high standard of living. Lethbridge is also home to the University of Lethbridge and Lethbridge College, two of the community's largest employers.

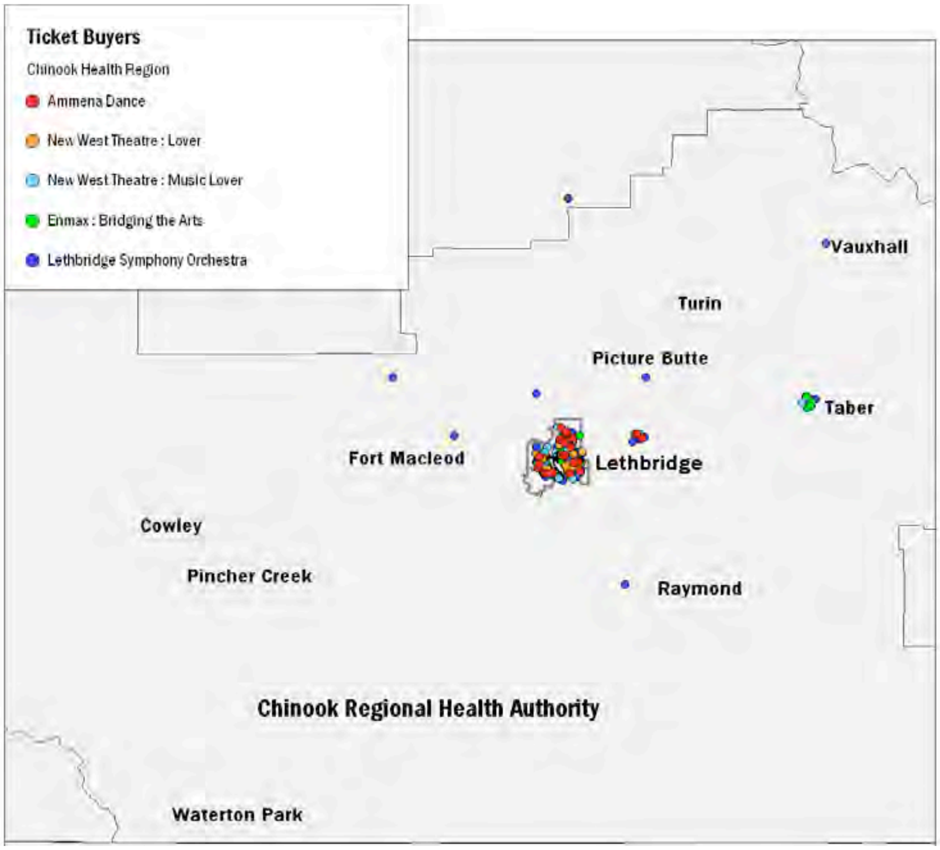
- **Chinook Health Region:** Defined by Alberta Health Services, the Chinook Health Region encompasses Lethbridge and communities, including Picture Butte, Fort Macleod, Taber, Coaldale, Pincher Creek, and Magrath. Geographically, the Health Region is 25,896 square kilometers and is bordered by the United States to the south.



We came to this definition by mapping ticket buyers and subscribers for the New West Theatre, Lethbridge Symphony Orchestra, Ammena Dance Company and Bridging the Arts (at the Enmax Centre). In our broad experience with hundreds of cultural facilities across various markets in North America, we have learned that roughly 80 percent of a performing arts facility's audience base comes from within a 45 to 50-kilometer radius.

This map shows that audience data from these organizations supports this argument, showing that 93% of audiences are from within the City of Lethbridge, and 98% are from within a 50-km radius.

The following map shows ticket buyers from Ammena Dance, New West Theatre, Bridging the Arts and Lethbridge Symphony Orchestra within the Chinook Health Region.



The high percentage of City audiences suggests most local arts organizations aren't reaching the regional population. We have included the Chinook Health Region to assess the market for events with regional appeal, potentially touring acts and events. Our experience with western communities indicates that these audiences are willing to travel farther to attend performance and events.

Resident Population

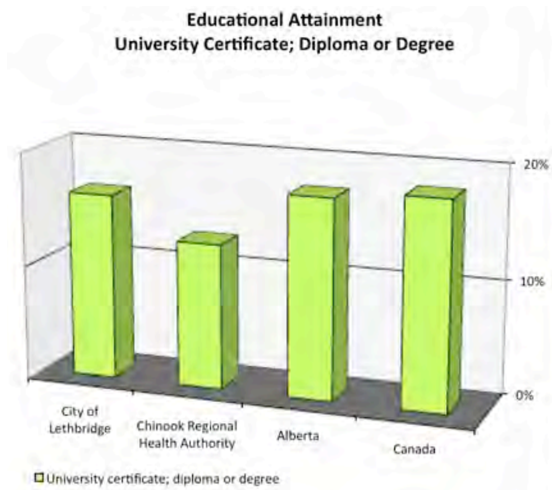
A series of charts, attached to this document as Appendix A, compare key characteristics of the following geographical market segments:

1. The City of Lethbridge
2. The Chinook Regional Health Area

Data used for this analysis comes from the 2006 Statistics Canada Census, the City of Lethbridge and Alberta Health Services.

This research allows us to characterize the market as:

- **Regional Hub:** The City's 2009 Census population is just over 85,000 residents, making Lethbridge the fourth largest City in Alberta. The region surrounding the City has a population just over 150,000, making Lethbridge a hub of Southern Alberta and a destination for retail, business and entertainment.



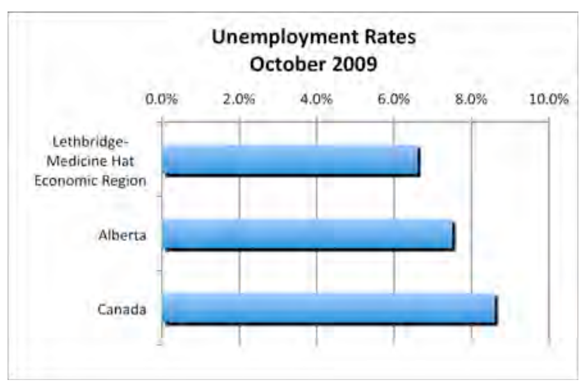
- **Educated:** Educational attainment rates for the City's population are comparable to provincial and national levels. Additionally, the City's population has high levels of individuals holding a college, vocational or other non-university certificate program. Outside of the City, the region has lower educational attainment levels, suggesting a lower propensity to attend arts events than City residents.

- **Retirement Community:** In comparison to provincial and national data, the City of Lethbridge and regional market both have significant levels of populations over 65, confirming the communities' identity as a popular retirement location.

- **Post-college Professionals:** The City of Lethbridge has a higher than average percentage of young adults aged 20 to 34. Nearly 10% of the population is aged 20 to 24, suggesting that the University has successfully attracted and retained a young population.

- **Asian minority population:** Approximately 5% of the City's population identify as Asian. Census data suggests that the Asian minority population is primarily Japanese and Chinese residents.

- **Stable Economy**: Historically, the Lethbridge-Medicine Hat Economic region has maintained low labour unemployment rates. Data obtained from Alberta Employment and Immigration indicates that unemployment has increased to 6.6%, but remains lower than the national rate of 8.6%. Data released in October 2009 indicates that Alberta has the steepest rate of decline for employment (3.3%) of all provinces.



- **Middle Class:** Compared to national data, Lethbridge has higher percentages of households earning $25,000 to $49,000 and $50,000 to $69,999. Overall, Lethbridge is less affluent than the province, as it has lower then average households earning above $100,000. It should be noted that Statistics Canada does not collect household income distribution information by Health Region, and as a result we were unable to evaluate household income for the Chinook Health Region.

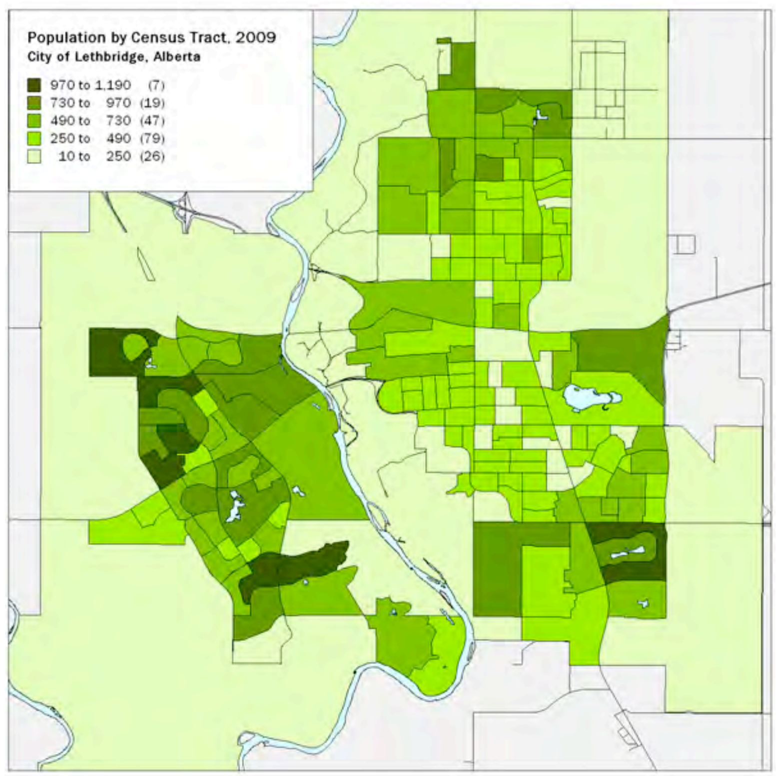
Market Trends

A review of Statistics Canada data, City planning documents and population estimates, City census data, population projections for Alberta Health Services and information from the Alberta Government indicates that the market is:

- **Growing:** The population of the City of Lethbridge is expected to increase in the coming decade. Population projections established by the City Planning Department suggest a 15% population increase between 2010 and 2020. Current planning for the City's Municipal Development & Integrated Sustainability Plan projects that the population will reach 150,000 by 2050.

- **Aging:** Retiree population levels are expected to maintain steady growth. By 2016, 16% of the population is projected to be over 65. Comparable to national statistics, Lethbridge is home to an aging baby boomer population. As a result, the percentage of 'empty nesters' aged 55 to 64 is expected to show significant growth in the coming years. Population projections indicate this cohort is expected to increase from 8.5% of the population in 2001 to 13.1% of the population by 2016[2]. Long term estimates developed by Statistics Canada show that Canada's population over 65 is expected grow to nearly one-quarter of the population, with the first baby boomers reaching retirement age in 2011.

- **Declining Youth Population:** An analysis of young population trends indicates that the percentage of school age children ages 5 to 14 is projected to decrease in the coming years. In 2001, populations in the 5 to 14 year old cohort made up 13.1% of the City's population. Estimates developed by Alberta Health Services indicate that these levels are projected to drop to 11.1% by 2016.



- **Population Density:** This chart shows the City's 2009 census data, by census tract. A review of census data for 2002, 2006 and 2009 suggests population growth and higher density towards the outer regions of the City. Population density is also higher west of the Oldman River, where residents are closer to the University of Lethbridge.

[2] Alberta Health Services, Population Projections for Chinook Health Region, Subsection #1

5. comparable markets

To assess the demand for new facilities, we compared key population characteristics and characteristics of existing traditional facilities to five markets in Canada. Comparable markets were selected based on population size and level of educational attainment. For the purpose of this exercise, we researched traditional performance facilities over 400 seats.

This following chart indicates that Lethbridge:

- Has an educated population, with 16% of the population holding Bachelors degrees and higher. The level of educational attainment is higher than other comparable Alberta markets, but is slightly lower than Regina and Saskatoon. Victoria is highly educated, with 28% of the population (Age 15+) holding bachelors degrees or higher.
- Household income is slightly lower than median incomes from Red Deer and Medicine Hat, but comparable to markets outside of Alberta.
- Alberta is well served by the ENMAX Centre. For a population of its size, the 6,500-seat ENMAX Centre provides .087 arena seats per capita, a relatively high ratio when compared to these other markets.
- Our inventory of traditional performance venues indicates that Lethbridge has a total capacity of less than 1,000 seats, and .013 seats per capita. These numbers are significantly lower than all other comparable markets.

Comparable Markets

	Lethbridge, AL	Red Deer, AL	Medicine Hat, AL	Regina, SK	Victoria, BC	Saskatoon, SA
2000 Census Population	67,374	67,829	51,249	178,225	74,125	196,861
2006 Census Population	74,637	82,772	56,997	179,245	78,057	202,340
Six Year Growth (%)	9.73%	22.00%	10.08%	0.57%	5.04%	2.71%
2006 Population (Age 15+) with Bachelors Degree and Higher (%)	16.19%	11.37%	9.85%	18.68%	28.04%	20.58%
2005 Median Private Household Income	$52,122	$63,034	$55,858	$70,353	$38,885	$49,313
Arena Facilities	ENMAX (6,500)	Enmax Centrium Arena (6,886)	Medicine Hat Arena (4,006)	Brandt Centre (7,000)	Save-On-Foods Memorial Centre	Credit Union Centre (14,000)
Total Capacity	6,500	6,886	4,006	7,000	7,000	14,000
Arena Seats per Capita	0.087	0.083	0.070	0.039	0.090	0.069
Traditional Performance Facilities (400 seats or more)	Yates Centre (488)	Red Deer Memorial Centre (788)	Esplanade (700)	Conexus Arts Centre (2,031)	Royal Theatre (1,434)	TCU Place Theatre (2,027)
	University Theater (450)	Festival Hall (525)	Medicine Hat College Theatre (548)	The State (1,200)	U Victoria, Farquar Auditorium (1,051)	Centennial Auditorium (2,003)
		Red Deer College PAC (500)		University of Regina, Education Auditorium (800)	Alix Goolden Performance Hall (800)	Broadway Theatre (540)
				Casino Regina Show Lounge (724)	McPherson Playhouse (772)	Odeon (1,000)
				University of Regina, Riddell Centre (425)		
				Regina Performing Arts Center (418)		
				Globe Theatre (406)		
Total Capacity	938	1,813	1,248	6,004	4,057	5,570
Total Performance Facilities, 400+ seats	2	3	2	7	4	4
Seats per capita	0.013	0.022	0.022	0.033	0.052	0.028

Venues in comparable markets stay active by presenting and renting to a wide variety of genres and acts, the types and numbers of which are shown in the accompanying chart. The Esplanade presents touring artists and arts groups, working with promoters and independently looking to bring out-of-town acts to Medicine Hat. Dance presentations, classical music and cultural events are featured to fill out the year-round rental and community activity. The McPherson Playhouse in Victoria offers a diversity of presented activity with dance, music, and cultural events. Victoria's other large venues supplement the McPherson with more limited presenting (but a full calendar of rental and outside-presenter activity). Victoria also has the highest seat-per-capita ratio at .052 seats per individual. As a result, Victoria is well-served by its venues for a community of its size.

Also notable is that in areas such as Red Deer, Medicine Hat, Regina and to an extent Victoria, there exists a secondary venue with a more focused scope of performance and genre – for example, the Globe Theatre in Regina which supplements the Regina PAC's limited presented offerings with rich seasons of drama and musical theatre. In Medicine Hat, the College Theater is mainly utilized for the theatre department's own presentations (and complements the Esplanade's rental-only theatre offerings). The Red Deer Memorial Centre, which is owned and booked by the City, appears underutilized. In this case, the College Performing Arts Centre is the primary presenter in the community. In Saskatoon as well, the most significant presenter is the Broadway Theatre, in which presenting generates approximately 13,000 audiences each year. These examples show the variety of levels in presenting in community-centered arts facilities, and what can be sustained in like markets.

Presenting Activity

	Capacity	Dance	Classical Music	Pop Music / Country	Drama	Musical Theatre	Comedy	Cultural
Red Deer								
Red Deer Memorial Centre	788			5			1	
Estimated Attendance				2,640			528	
Red Deer College PAC	500		7	3	10	10		2
Estimated Attendance			2,345	1,005	3,350	3,350		670
Total Red Deer Performances		0	7	8	10	10	1	2
Total of Red Deer Attendance		0	2,345	3,645	3,350	3,350	528	670
Medicine Hat								
Esplanade	700	3	3	5			1	3
Estimated Attendance		1,407	1,407	2,345			469	1,407
Medicine Hat College Theater	548				10			
Estimated Attendance					3,672			
Total Med. Hat Performances		3	3	5	10	0	1	3
Total Med. Hat Attendance		1,407	1,407	2,345	3,672	0	469	1,407
Regina								
Regina Performing Arts Center	418	1			2			
Estimated Attendance		280			560			
Globe Theatre	406				75	24		
Estimated Attendance					20,402	6,528		
Total Regina Performances		1	0	0	77	24	0	0
Total Regina Attendance		280	0	0	20,962	6,528	0	0
Victoria								
McPherson Playhouse	772	5	1	1	2		3	2
Estimated Attendance		2,586	517	517	1,034		1,552	1,034
Alix Goolden	800		1					
Estimated Attendance			536					
U Victoria Farquar Auditorium	1,051	3	10	3				5
Estimated Attendance		2,113	7,042	2,113				3,521
Royal Theatre	1,434	10		1				
Estimated Attendance		9,608		961				
Total Victoria Performances		13	10	4	0	0	0	5
Total Victoria Attendance		14,307	8,095	3,591	0	0	0	4,555
Saskatoon								
Broadway Theatre	540			24				12
Estimated Attendance				8,683				4,342
Total Saskatoon Performances		0	0	24	0	0	0	12
Total Saskatoon Attendance		0	0	8,683	0	0	0	4,342

Dance Classical Music Pop Music / Country Drama Musical Theatre Comedy Cultural

6. current facilities

An examination of the current inventory of facilities, and their use, condition and availability is also key to this analysis. The community has expressed interest in a performance venue capable of accommodating many different types of uses and users, and we have compiled and closely examined an inventory of all facilities regularly used for performances and performing arts events within the City of Lethbridge.

The inventory, included as Appendix B, considers the physical features and types of activity hosted within each space. Webb Management Services has rated the condition and functionality of each facility using eight variables. These include:

1. Facility condition
2. Staff and support
3. Theatrical functionality
4. Room acoustics
5. Customer amenities
6. Performer amenities
7. Atmosphere and character
8. Suitability for users

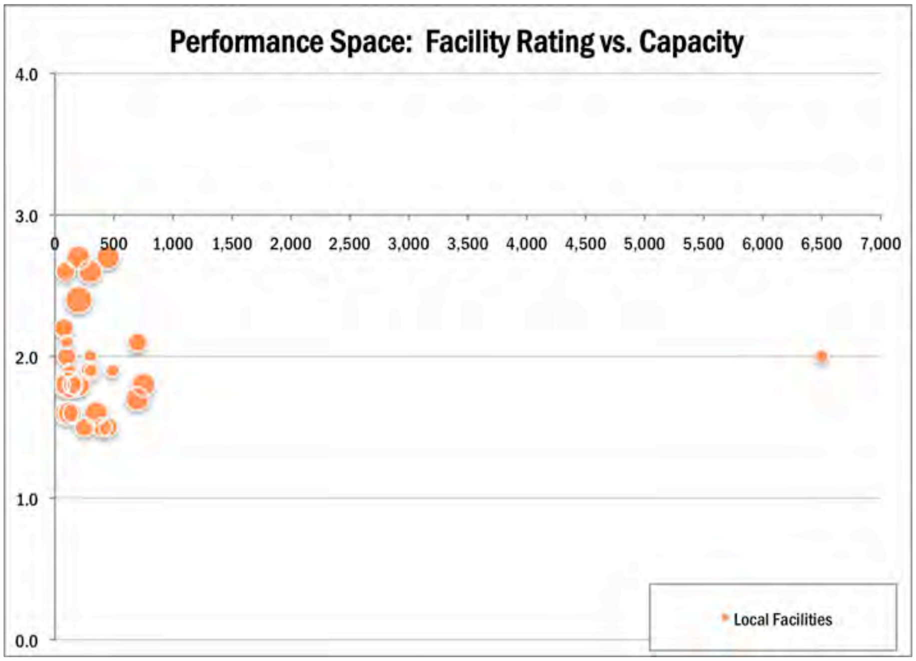
Variables are rated on a scale of 1 to 4, higher being best. Building condition and staff and support categories carry the most weight. Ratings are determined from a variety of inputs: some of these facilities have been visited by the consulting team; other ratings are determined based on self-reported or published information, or on anecdotal information and input from interviewees.

Local Performance Venues

There are 31 venues that currently accommodate live performance on a regular basis within the City of Lethbridge. Their capacities, features, and types of activity are detailed in Appendix B.

This inventory indicates the following:

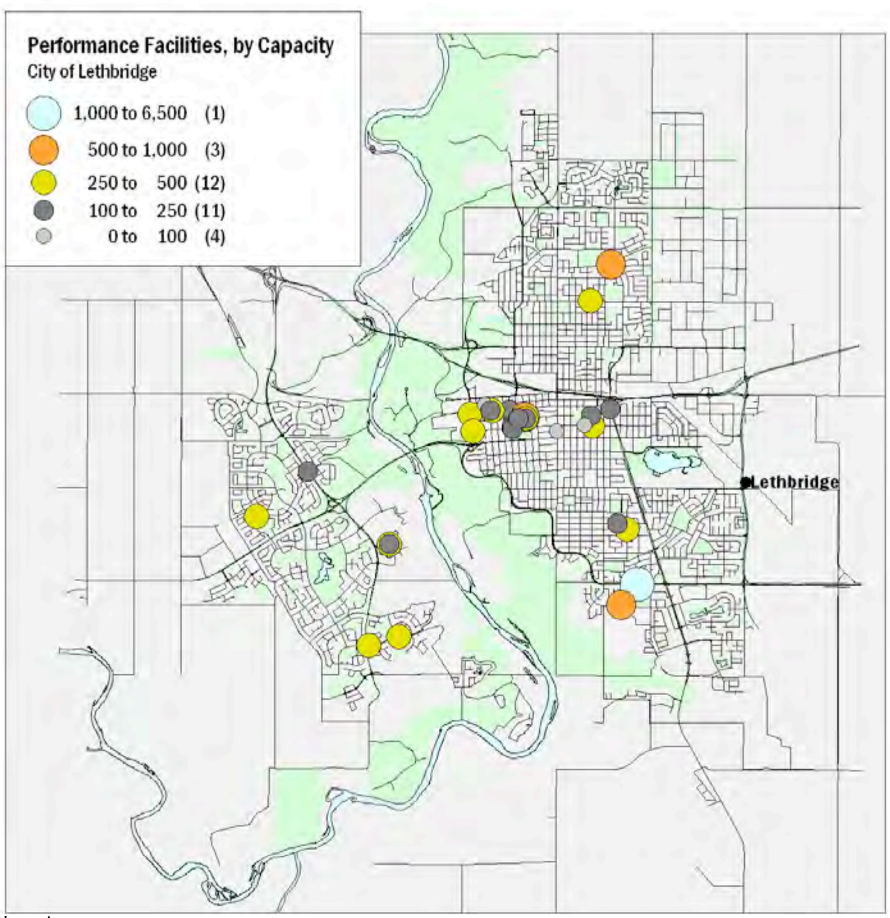
- 25 spaces have capacities below 500 seats. At 6,500 seats, the Enmax Centre is the largest venue in the local market. There are no venues that are larger than 750 but smaller than 6,500 (excepting the conversion of the Enmax for smaller-scale events).
- 16 facilities used for performance are part of educational institutions or churches.
- Only the University Theatre at the University of Lethbridge has a fly system.
- 23 (74%) facilities have parking available.
- 17 (55%) have rehearsal or program space on site.
- 23 (74%) of the facilities are rented by local and regional arts organizations.
- 11 (35%) offer participatory activities such as class, workshops and lectures.



This graph compares the seating capacity of each venue to the overall rating of each facility. The size of the bubble correlates to the number of activity types accommodated in the given space.

Generally, Lethbridge performance facilities are in fair condition and have capacities under 500 seats. The Enmax Centre, which can also be configured as a 1,200-seat venue, is the only facility over 1,000 seats. As a performance venue, the Enmax Centre received a low rating because of its below average theatrical functionality, room acoustics and atmosphere.

The following map indicates the location and size of each facility. Most venues are located on the east side of Lethbridge and the market is fairly concentrated in the downtown. As we discussed above, there is a gap in the inventory for venues between 1,000 and 6,500 seats.

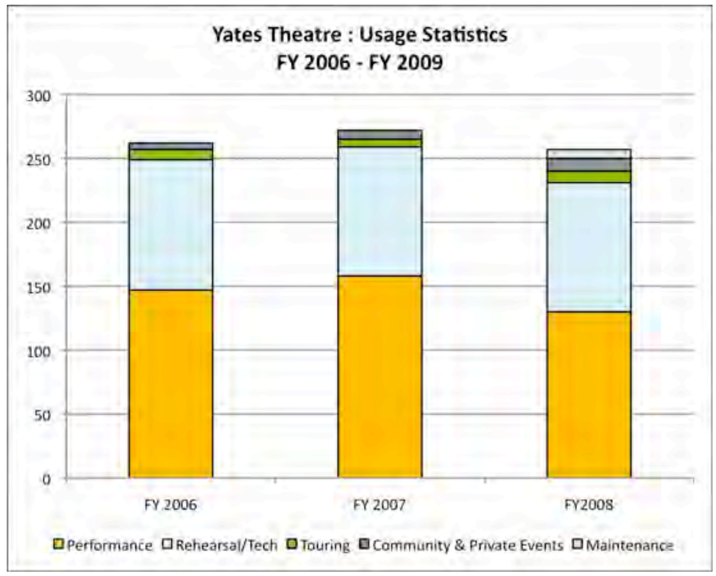


Facility Usage

To understand how current facilities are being used, we evaluated historical booking data from the Yates and Sterndale Bennett Theatres and booking calendars from three University of Lethbridge facilities, the David Spinks Theatre, University Theatre and Recital Hall. Additional information on these facilities, including capacities, facility rating and technical components can be found in the previous chapter.

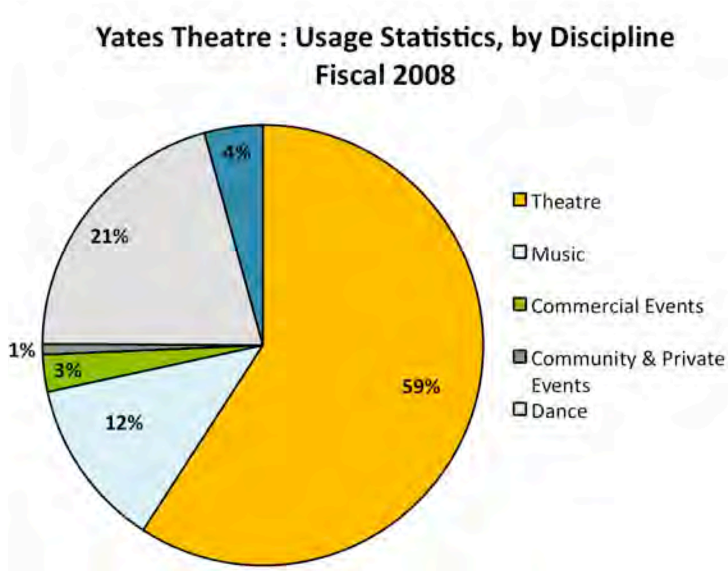
Yates and Sterndale Bennett Theatres

Usage statistics for the Yates and Sterndale Bennett Theatres were compiled by City employees, and analyzed by Webb Management Services. We reviewed calendars from fiscal 2006 to 2008, assessing how frequently the theatres are used and how they are being used. We found activity at the Yates Theatre to be overwhelming; the Yates was utilized an average of 263 times over the course of each year. The Yates Theatre is primarily used by local arts organizations, for an average of 145 performances and 101 rehearsals each year. There is also occasional usage for touring acts, community meetings and private events.



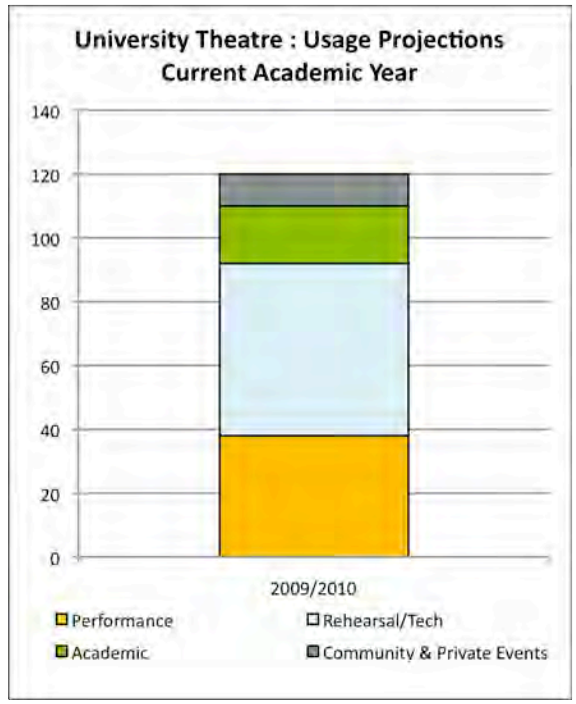
Our review of usage statistics by discipline also found that theatre groups are the primary users of the Yates Theatre. Not surprisingly, New West Theatre was the most frequent renter in fiscal 2008, utilizing the Yates Theatre for a total of 78 days. Lethbridge Musical Theatre also used the Yates for 33 days. This level of use has remained consistent over the past three years.

Usage at the Sterndale Bennett Theatre followed a similar pattern, suggesting a very busy space utilized by theatre groups for rehearsal and performance. From fiscal 2006 to 2008, the Theatre was used approximately 200 times each year, for performances, rehearsals and community events. In fiscal 2008, the Theatre was used for 70 performances and 91 rehearsals. New West Theatre was also the primary user, booking the Sterndale Bennett Theatre for a total of 105 days. The space is occasionally utilized for music performances and festivals, trade shows and dance recitals.



University of Lethbridge Facilities

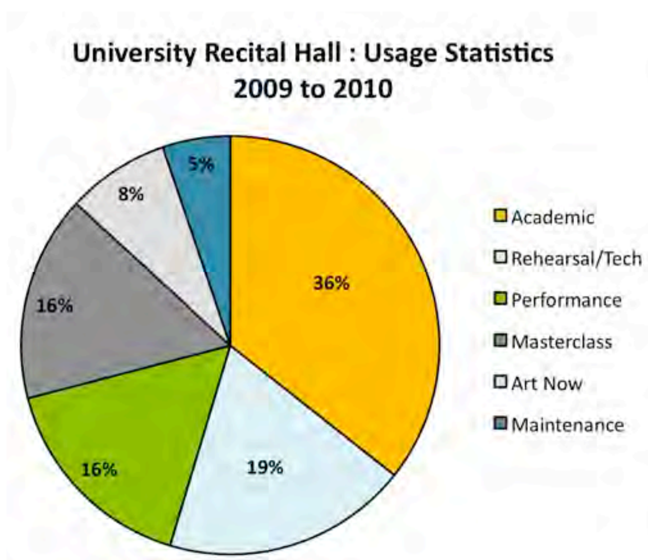
Staff from the University of Lethbridge Faculty of Fine Arts compiled usage statistics for the University facilities, including the David Spinks Theatre, University Theatre and Recital Hall. University staff provided the booking calendar for each space for the current academic year. The current academic year is not yet over, and some usage data represents tentative bookings. Nevertheless, this information does show how active each facility is. The University of Lethbridge also has a policy that restricts usage by community organizations during certain periods when school is in session.



The University Theatre is a fairly busy space, with a total of 120 uses expected for the academic year. The University of Lethbridge Department of Theatre & Dramatic Arts is the primary user, and expects to use the University Theatre for a total of 89 uses. Other occasional users include local schools, community organizations, and other University departments.

The David Spinks Theatre, a black box used for academic purposes, is used 108 times during the academic year. The University of Lethbridge Department & Dramatic Arts dominates this space, using it over 100 times. The Spinks Theatre is seldom used by outside users.

The Recital Hall is the University's busiest venue, fulfilling multiple functions as an intimate performance venue, classroom and rehearsal studio. A review of usage statistics indicates that the Recital Hall is used multiple times each day, for a total of 516 uses. Over a third of usage can be attributed to academic functions including class, orientation and workshops. University groups such as Music in Recital and Women's Chorus and Faculty Artists and Friends use the Recital Hall for 19% of total uses. The University of Lethbridge Department of Music is the primary user of the Recital Hall, occupying the space for 479 uses. The



Conservatory of Music occasionally utilizes the Recital Hall.

Our review of usage data for University and City performance facilities indicates that:

- The Yates Theatre is heavily utilized for theatre performances and rehearsals. The venue has total annual usage of over 250 uses, indicating that there is little additional room for other events. The Yates is also quite busy as a public venue, hosting over 145 performances each year.

- The Sterndale Bennett Theatre supports many of the same organizations as the Yates Theatre, and is an active performance and rehearsal venue for theatre groups such as New West Theatre, Lethbridge Musical Theatre, and Playgoers of Lethbridge.

- Both the University Theatre and David Spinks Theatre at the University Lethbridge are relatively busy with Department of Theatre & Dramatic Arts academic functions and student performances.

- The Recital Hall at the University of Lethbridge is heavily utilized for University music events, classes and rehearsals.

Conclusions

Our analysis suggests that there is a lack of high-quality facilities serving the region. Many groups are using churches, schools and bars, which generally lack customer amenities such as ticketing or comfortable seating, and theatrical functionality such as wing space.

Key existing facilities are in demand and have a high level of usage. The Yates Theatre and Sterndale Bennett Theatre are busy spaces that are difficult to book, particularly if the user requires a block of time. University facilities are also busy spaces utilized primarily for academic functions.

In particular, there is a lack of mid-sized venues between 1,000 and 6,500 seats. The Enmax Centre can be configured as a 1,200-seat venue with curtains and dividers, but this is expensive, and lacks proper support. In this configuration, the Enmax Centre can be appropriate for certain performances and touring acts, but is largely inadequate for live performances, particularly unamplified music, dance and theatre. Notably, few facilities are able to present touring programs.

7. uses and users

Evaluating and understanding the need for new facilities on part of arts organizations and other potential users is key to this process. Information regarding interest and need for new facilities was collected via a series of one-on-one interviews with leaders of local and regional arts organizations and educators.

A survey was then sent to a list of organizations and individuals developed by the Steering Committee as well as members of the Allied Arts Council. In total, we received 68 complete survey responses. Of those, 38 were unique responses from arts and cultural organizations (the survey was taken by multiple people from organizations and individuals that were not identified as users). The survey asked questions about current facilities, interest in new facilities, and then characteristics and size of new performance facilities.

Summary

Both the interviews and survey suggest an overwhelming interest for new performance facilities. Nearly 85% of survey respondents indicated an interest in utilizing new performance facilities. Over 55% of survey respondents indicated that they are unsatisfied with the condition of spaces they currently use, and offered the following facility issues:

- Lack of accessibility
- Poor acoustics
- Frequently designed without dance performance/rehearsal in mind
- Limited storage space and backstage area
- Insufficient patron amenities, including parking, washrooms, and lobby areas
- Small stages and poor sightlines in most venues
- Theatrical equipment is unreliable or requires updating (58% of survey respondents indicated that they are unsatisfied with equipment available), and
- Limited availability and challenge booking a performance space. 63% of survey respondents indicated that they are unsatisfied with availability of the spaces they currently use. The Yates Theatre and Sterndale Bennett Theatre were mentioned as frequently booked up and unavailable for smaller groups or occasional users. University facilities are also perceived as heavily booked with academic programming and student and faculty productions.

User Demand

To fully understand the types of spaces that users require, we asked study participants for their ideal capacity, the number of uses for performance, rehearsal and other events, and the type of activity that might take place. The resulting chart breaks down demand by capacity, also noting the discipline of each activity. The following chart suggests that:

- There is significant demand for performance facilities ranging from 500 to 999 seats. Groups would potentially use a space of this size for 155 performances, 155 rehearsals and 15 other events. Potential users have a range of activities, including theatre, dance, music and education.

- Demand for facilities with a capacity ranging from 100 to 299 seats is also significant and totals 243 uses. Again, activities are very much multi-disciplinary, including film, culture, theatre, music, dance and photography.
- There is also considerable interest in facilities with 1,000 to 1,500 seats. Generally, activities are music-oriented, but also include activities such as opera and Global Drums, a percussion group that performs dance and music.

Performing Arts Master Plan - City of Lethbridge
Use Projections - Performance Facilities

Potential User	Performances	On-stage Rehearsals	Other Uses	Total Uses	New or Existing?	Capacity Range	Ideal Capacity	Type
Buskers Association of Lethbridge			15		Existing	8-25 seats	20-seats	Theatre
Lethbridge Scottish Country Dance Club			45		Existing	15-50-seats	25-seats	Music
Chinook Woodturners			12		Existing	40-75 seats	75-seats	Cultural
	0	0	72	**72**			0-99 capacity	
Lethbridge Centennial Quilters' Guild			50		Existing	75-120 seats	100-seats	Cultural
Southern Alberta Art Gallery			25		Existing/New	75-250-seats	100-seats	Cultural/Film
New West Theatre - Black Box	50	65	10		Existing/New	75-130-seats	110-seats	Theatre
Registered Music Teachers Association	4				Existing	100-200 seats	150-seats	Music
Lethbridge Photography Club			3		Existing	150-300-seats	200-seats	Photography
Exisdance (Dance Company)	3	12			New	50-300-seats	200-seats	Dance
LPIRG	5	5	5		Existing	10-500-seats	200-seats	Cultural
Lethbridge Irish Dance Company	2	4			Existing	200-300-seats	250-seats	Dance
	64	86	93	**243**			100-299 capacity	
Avanti Choral Association	2	2			Existing	100-400-seats	100-400-seats	Music
Lethbridge School District #51	10	5	5		Existing	250-600-seats	300-600-seats	Music/Education
Lethbridge International Film Festival			7		Existing	100-300-seats	300-seats	Film
Now Showing Live Arts Series, FFA, University of Lethbridge	5	5	5		Existing/New	150-300-seats	300-seats	Dance
Desert Wind Bellydancers	3	6	2		Existing	200-500-seats	300-seats	Dance
Conservatory, University of Lethbridge - Youth Strings	2	2			Existing	350-500-seats	400-seats	Music
	22	20	19	**61**			300-499 capacity	
Playgoers of Lethbridge	6	6			Existing	100-500-seats	500-seats	Theatre
New West Theatre - Proscenium	100	75	10		Existing/New	350-600-seats	500-seats	Theatre
Now Showing Live Arts Series, FFA, University of Lethbridge	5	5	5		Existing/New	400-600-seats	500-seats	Dance
Lethbridge Big Band	15	5			Existing	500-1,000-seats	500-1,000-seats	Music
Exisdance	1	2			Existing	450-700-seats	600-seats	Dance
St. Patrick Fine Arts Elementary School	4	2			Existing	100-900-seats	700-seats	Music/Education
Lethbridge Musical Theatre	24	60			Existing	500-1,000 seats	750-seats	Theatre
	155	155	15	**325**			500 to 999-seat capacity	
Star Singers	10	4			Existing	500-2,000-seats	1,000-1,500-seats	Music
Global Drums, University of Lethbridge	4	12			Existing/New	1,000-1,500-seats	1,000-1,500-seats	Music
Ballet Program, University of Lethbridge	2	2			New	1,000-seats	1,000-seats	Dance
University of Lethbridge Singers	4	4			Existing	1,000+ seats	1,000-seats	Music
Sports & Recreation Services, University of Lethbridge	2	2	1		Existing/New	500-1,200-seats	1,000-seats	Dance/Recreation
Lethbridge Community Band Society	6	6	10		Existing	1,000-1,500-seats	1,200-seats	Music
Lethbridge Symphony Orchestra	14	28	2		Existing/New	1,000-1,500-seats	1,200-seats	Music
Conservatory, University of Lethbridge	3	3			Existing	750-1,500-seats	1,200-seats	Music
Vox Musica	4	4			Existing	750-1,500-seats	1,200-seats	Music
Opera Workshop, University of Lethbridge	16	25	3		Existing/New	750-1,400-seats	750-1,110-seats	Music/Opera
	65	90	16	**171**			1,000 to 1,500-seat capacity	
Total Annual Uses	**306**	**351**	**215**	**872**				

Rehearsal and Program Space

Finally, we asked organizations and users if they might have interested in additional rehearsal or program space. In all, we received 26 positive responses. Seventeen organizations were able to provide detailed estimates of potential use. The following chart depicts estimates from these organizations.

Performing Arts Center Masterplan - City of Lethbridge Use Projections - Rehearsal & Program Facilities					
Potential User	**Rehearsal Uses**	**Classes/Workshops**	**Other Uses**	**Ideal Capacity or Space**	**Type**
Lethbridge Community Band Society	80	4	40	Same size as main stage, and a smaller space	Music
New West Theatre	40	40	5	Rehearsal studio	Theatre
LPIRG	5	5	5	10-person capacity	Cultural
Conservatory, University of Lethbridge		1750	4	Practice Studios	Music
Star Singers	40	200	2	Various sizes	Music
Now Showing Series, University of Lethbridge	4	10	4	10 X 30	Dance
Registered Music Teachers Association		2		50-person capacity	Music
University of Lethbridge Opera Workshop	25			Similar dimensions as venue	Music
Desert Wind Belly Dancers	6	450		30-person capacity	Dance
Lethbridge Symphony Orchestra	30			Similar dimensions as venue	Music
Lethbridge Musical Theatre	80	10		Similar dimensions as venue & 2-3 smaller studios	Theatre
Lethbridge School District #51		15	5	Rehearsal studio	Music
Drama Nutz Productions	75			20 x 50	Theatre
Chinook Woodturners		40		700sq feet	Visual Art
Playgoers of Lethbridge	10	2		Rehearsal studio	Theatre
Lethbridge Irish Dance Academy	2	200	1	Rehearsal studio	Dance
Lethbridge Big Band	5			Similar dimensions as venue	Music
	402	2728	66		
Total Annual Uses	**3,196**				

Our review of this information indicates that:

- Demand for additional rehearsal or program space stems from the shortage of rehearsal space, an interest in expanding availability of participatory programming and outreach, and need for rehearsal space adjacent to performance facilities. We anticipate that new facilities at the Community Art Centre will satisfy a percentage of demand. However, additional rehearsal and program facilities could be attractive, particularly if they are in proximity to new performance facilities.

- There is strong demand for facilities that are larger than existing studios and rehearsal spaces. Music ensembles and larger groups expressed the need for a rehearsal hall in size approximate to new performance facilities. Groups also require on-site temporary storage, projection and audiovisual equipment, a dance floor and acceptable acoustics for both live and amplified music.

- The Conservatory at the University of Lethbridge has the greatest need for space, indicating demand for 10 studio spaces with afternoon and evening availability during the academic year. Interviews with Conservatory staff suggest that there is interest in exploring new facilities because their programs are popular and growing, they serve the public and would like additional community exposure. As it stands, they currently have to work around other University programs and ensembles and have more demand for instruction than they have space to provide. We are intrigued by the possibility of the Conservatory as a music education partner in this project.

8. opportunities, benefits and impacts

As studies and many live-model examples have shown, a vibrant cultural community attracts employees and professionals who want to live and work in a stimulating and enriching environment, enhancing the workforce and productivity of existing businesses and industries. Arts and cultural facilities can provide opportunities for new and expanding businesses as well, building retail and commercial activity, encouraging spending both directly and indirectly, and improving attractiveness to other new businesses and workers looking to relocate.

New arts facilities in Lethbridge should support broader community goals regarding the future of downtown and the City's vision of the next 20 years. To understand how the development of new performance facilities supports these initiates, we reviewed a number of planning documents, including:

- 2009 County of Lethbridge Strategic Plan
- 2008-2017 Lethbridge Capital Improvement Program
- Heart of Our City Master Plan (2007)
- 2003 Municipal Development Plan
- 1988 Downtown Area Redevelopment Plan

We also reviewed relevant community plans and studies made available to the consultant team, including:

- 2008 Community Values and Citizen Satisfaction Survey
- 2008 City of Lethbridge Annual Report
- 2008 Lethbridge Community Arts Centre Facility Program
- 2008 Central Neighborhood Issues Study Report
- A Sound Proposal (2005)
- 2005 Community Vision Session
- University of Lethbridge Core Campus Expansion Plan

We then gathered input from City leadership and personnel regarding other initiatives, including the City's Municipal Development & Integrated Sustainability Plan, which is currently being developed.

Our review of this information, supported by conversations with City representatives, indicates that new performance facilities would advance the following downtown, City and County goals:

- **Quality of life:** New facilities would be an attractive amenity, and could advance the community's quality of life through new or improved programs and offerings. Programs and events could provide a more inclusive range of informal arts and cultural experiences for all ages. Proper facilities that support a wider range of touring cultural and international acts and provide audiences with opportunities for greater learning and cultural understanding. New facilities could integrate the University into the community, connecting the student population and expanding programming to include more groups and downtown spaces. An invigorated cultural community could provide more reasons for University students to settle in Lethbridge, post-graduation, and thereby increase the intellectual capital in the area. Finally, facilities could provide space and resources for higher-quality and better-coordinated cultural experiences for educators and students, as well as providing a platform for outreach and education programs in the schools.

- **A Vibrant Cultural Community:** New performance facilities would support and nurture local arts organizations and artists, advancing the City's goal to create public/private partnerships for producers of culture. The City already demonstrates a propensity to embrace and excel in the arts. Providing spaces for production and performance and integrating the latest in up-to-date technologies and resources would promote innovation and creativity on behalf of artists and administrators.

- **Downtown Revitalization:** We endorse the idea that performance facilities should be situated in downtown Lethbridge. New facilities, if positioned downtown, would support the City's vision for downtown redevelopment. Particularly, these facilities would advance priorities identified in the Heart of Our City Master Plan, creating a downtown that is animated and vibrant, attractive to residents, visitors, businesses and corporations, and is a place for culture, heritage and the arts. New performance facilities should also fulfill design guidelines outlined in the Master Plan, and should enhance public space and be pedestrian friendly, green and safe. New facilities could also be an anchor for a 'corridor' of arts and culture in the downtown Lethbridge. The corridor's implementation will likely correspond with the planning and building of both visual and performing arts facilities, including the planned Community Arts Centre.

- **Cultural Tourism:** New arts and culture facilities can support increased tourism in the region through diverse and high-end programming, including touring and presented acts. By filling gaps in the facility inventory, touring acts and artists can be brought in to perform to Lethbridge. This can draw new audiences originating from outside of the city. These outside audiences spend money in local shops and restaurants, generating new income for the city and increasing its visibility in the region. Lethbridge's geographic location near certain UNESCO sites and national parks also makes it a natural resting and/or lodging site for short trips. There is an opportunity for performance and exhibition groups (or the venue itself) to partner with hotels and restaurants and create tourist packages to entice them toward cultural consumption—for example, dinner, a show, and a hotel room.

9.facility recommendations & concepts

Our research and interviews have lead to the following conclusions:

- There are high levels of educational attainment in the market, suggesting a strong propensity to attend arts and cultural events. The market also has a concentration of young adults and retirees, population segments that respond well to participatory arts activities.

- Compared to other similar cities, Lethbridge is under-served by the current set of facilities, both in terms of spaces for local groups and for touring programs.

- Current facilities in Lethbridge are only adequate in quality, but are very busy. Clearly, problems with capacity, acoustics, functionality and availability are all limiting the growth and development of the local arts community.

- Artists and arts organizations in Lethbridge have expressed strong interest and demand for a range of new and better facilities for performance, rehearsal and teaching. There is significant demand in three capacity ranges:
    - 100 to 299 seats
    - 500 to 999 seats
    - 1,000 to 1,500 seats

- New performing arts facilities would support a range of community goals, potentially contributing to increased quality of life, sense of community, downtown revitalization and cultural tourism. Notably, a downtown location for new facilities will serve these goals in a more significant way. And a set of facilities developed as a part of a cultural corridor can become a major destination for regional residents and visitors, also acting as a catalyst for additional commercial development.

Given what we have learned about the Lethbridge region and our sense of broader issues and trends in the world of cultural facility development, we would recommend the development of the following spaces:

The Mostly-Music Hall

We would recommend a hall with a capacity in the range of 1,250 seats that is oriented to music performance in its shape and functionality, but also has stage rigging and an orchestra pit able to support dance, musical theatre, opera, speakers, and other events. This implies an audience chamber with sufficient volume and acoustic geometry to support non-amplified orchestral and choral music as well as a large stage area with acoustic shell to create a stage configuration appropriate to music use. Removal of the shell and acoustic variability in the audience chamber will allow transformation of the space into a proscenium theatre with a full fly-tower and orchestra pit. The hall must also include ample backstage space, with dressing rooms, production offices, on-site storage, and efficient means to unload and mount a range of touring programs.

The design of this space must focus on the creation of a superior acoustical environment that supports the use of the space by the Symphony, Star Singers, and a range of other music groups while incorporating variability of the acoustic environment to provide the flexibility and functionality to support other performing arts programs. These other programs would include some community-based groups, but more importantly, a broad range of touring programs, including theatre and dance.

Activity estimates indicate that this space would be a busy, animated space. Local arts organizations and other users indicated an interest in using a space of this size for 171 uses annually. Additionally, we envision a at least 20 facility-presented events each year. In sum, the hall would be in use nearly 200 days per year, suggesting a relatively busy hall with some room to support growth over time.

Our capacity recommendation of 1,250 seats for this hall should be understood as a good number to start with. We see it as being large enough to support a range of touring programs and small enough to serve the needs of most of the relevant local arts organizations. As the project advances, there will be some pressure to increase the capacity (most likely from some users and promoters thinking of the future) and a lot of pressure to reduce the capacity (from other users and those responsible for funding the building and its operations).

The final capacity will result from a multitude of ongoing discussions and will ultimately be the number that gains the support necessary for the project to move forward. With careful planning and intelligent design, we could imagine that number going as low as 1,000 seats or as high as 1,500 seats. But for us, today, the right target is a capacity of approximately 1,250 seats.

The Mid-sized Theatre

We would recommend a theatre with a capacity in the range of 500 seats that is more oriented to theatre but also able to support a full range of performing arts programs (i.e. music, dance, opera) and other events such as speakers and film. This would also be a proscenium theatre with a full fly-tower, a large trappable stage, a small orchestra pit and significant backstage accommodations. The orientation is this space is towards dramatic and musical theatre, but here again we would stress the importance of supporting a broad range of programming.

The Multi-purpose Recital and Rehearsal Room

As a third space, we would propose a flexible recital hall with a capacity in the range of 250 seats to support performance, rehearsal and teaching space, mostly related to music. But once again we would stress the importance of having some level of flexibility such that this room could be used for smaller dance and theatre performances, rehearsals, meetings and special events.

Performing Arts Conservatory

Finally, we would recommend the development of a set of facilities that support the teaching of the performing arts to children and adults in Lethbridge. We are most impressed with the work and progress of the University-based Conservatory, and see a tremendous opportunity to bring them into new downtown facilities that can offer a broader range of learning opportunities. Their physical requirements include a set of dedicated spaces for teaching, practice and administration, as well as access to other performance and rehearsal spaces.

Recommended Approaches

We would also offer a series of general recommendations on new facilities and their development:

- Though it is easiest to imagine these new facilities as all being in one new building, this is not the only option for the community. There could be more than one building, developed incrementally over time. One or more of these spaces could be developed within existing structures, or in conjunction with the planned Community Arts Centre, and there could be other more commercially oriented pieces developed within the project, such as restaurants and retail. All of those options should be considered within the context of a long-term master plan for the community.

- This approach to the development of facilities (incremental multiple spaces, potentially including adaptive re-use) makes more sense if located in the downtown area, leading us to stress the concept of a cultural district starting with existing facilities (the Yates and SAAG), adding these recommended pieces and then adding other components (such as the Community Arts Centre), all within a larger downtown plan that addresses parking, public safety, access and opportunities for additional commercial development.

- Project phasing is another option. If the facilities were to be developed over a longer span of time, it would probably make the most sense to start with the Mostly-Music Hall. Once this hall was developed and financed, the Mid-Sized Theatre could come next. Also note that if the Performing Arts Conservatory is not pursued, the Multi-purpose Recital and Rehearsal Room could likely be downgraded to just a rehearsal room.

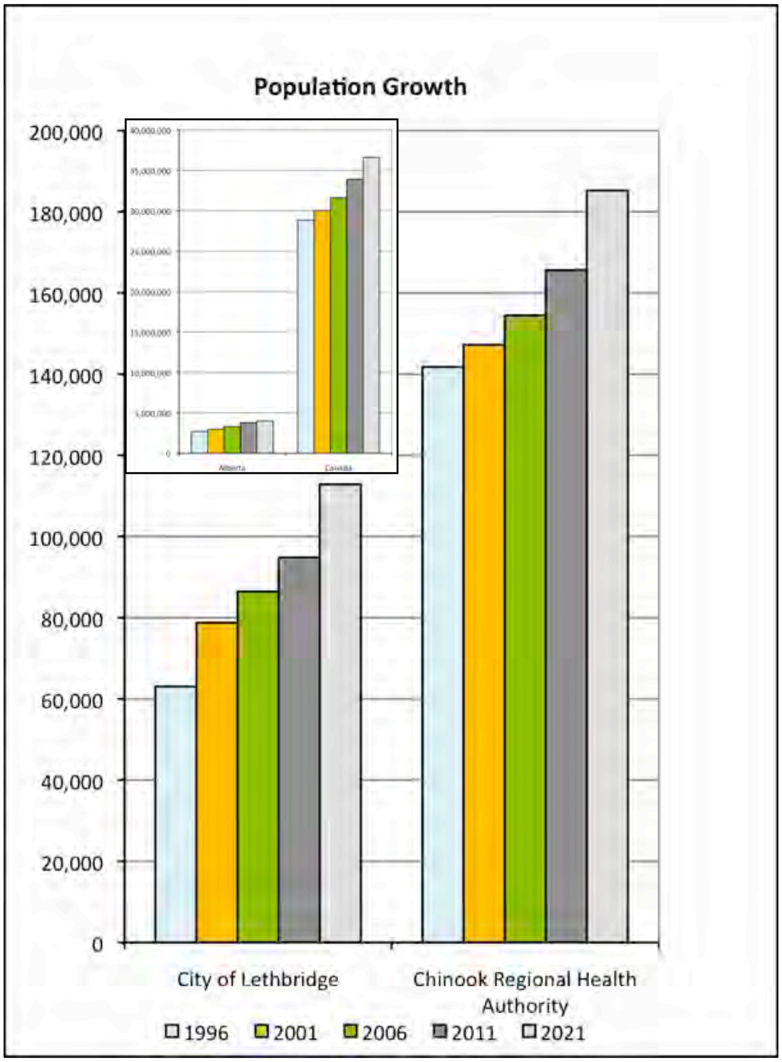
- For the three key performance spaces, we would encourage a serious look at flexibility and options to serve contemporary audiences, considering ways to offer a less formal, more intimate experience that is attractive to younger audiences and can accommodate a wide range of programs.

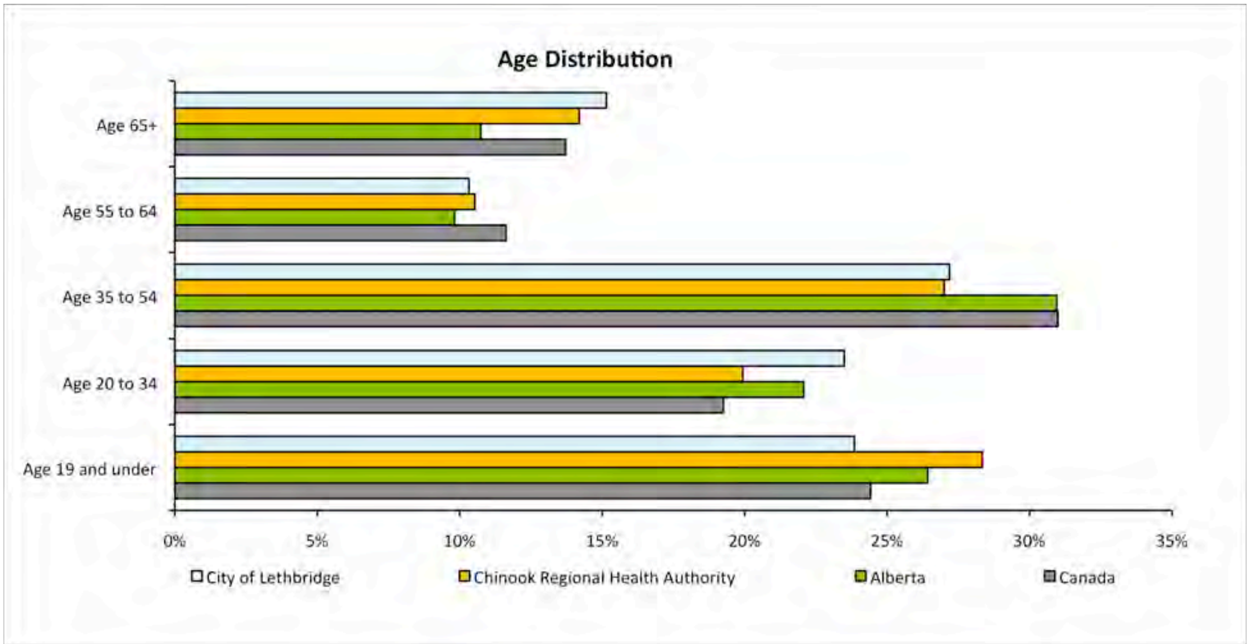
- We would also encourage the idea of large public spaces with enhanced food and beverage opportunities, moving toward the goal of creating community destinations that are often open and remain busy.

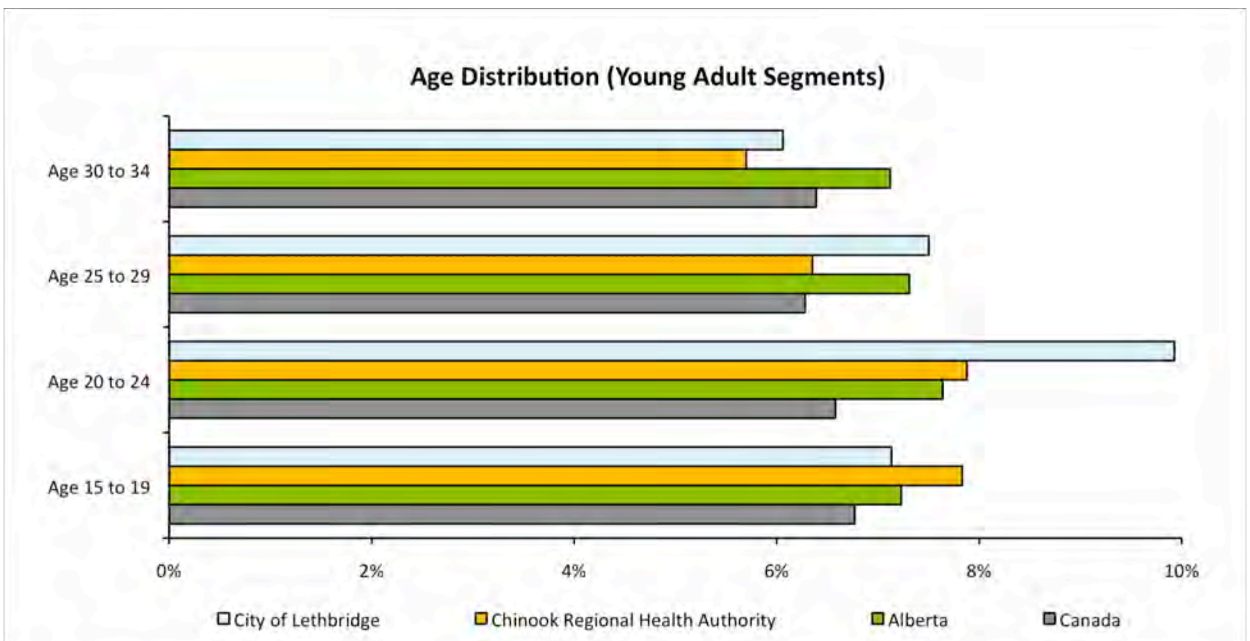
- Our recommendations are based on the assumption that the Yates Theatre remains active. We see this space as an important home for the performing arts that should be positioned as an affordable, reasonable quality facility that supports grass roots and community organizations, local schools, arts educators and emerging artists. Incremental improvements (and capital maintenance) should be funded to keep the facility safe and functional for a range of uses and users.

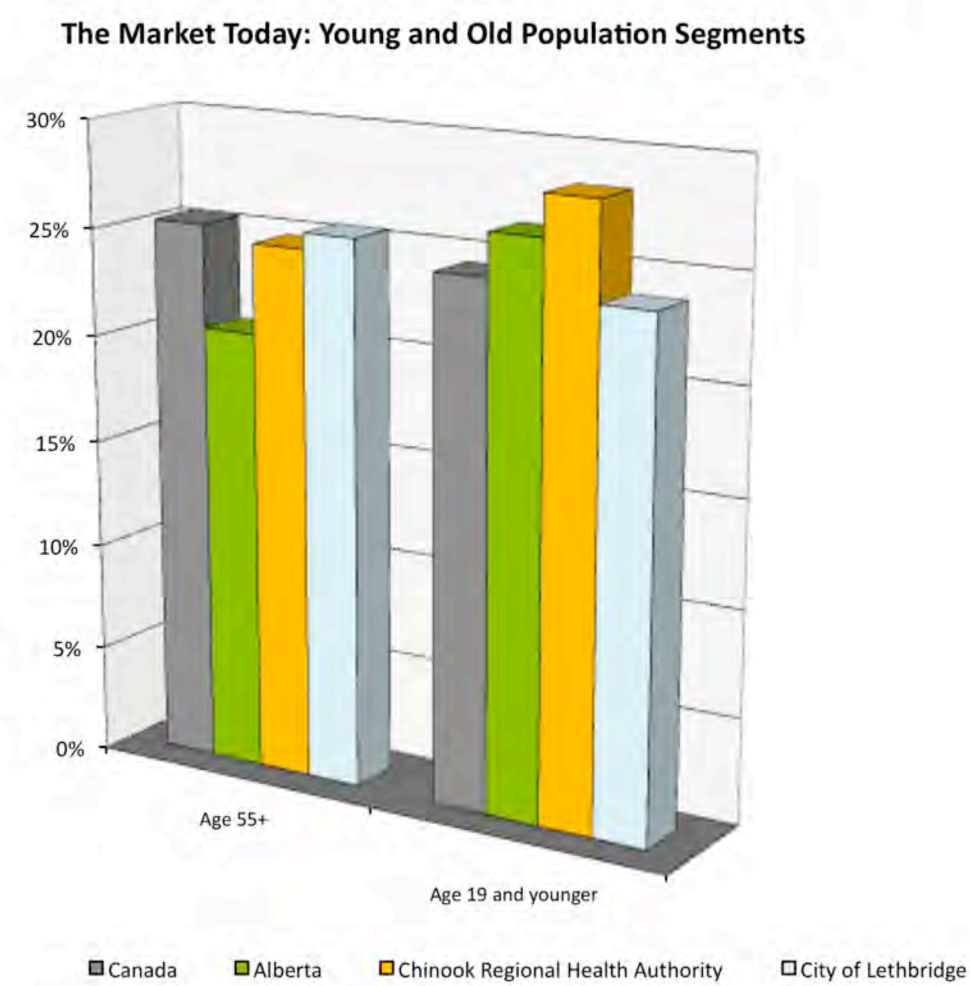
We look forward to reviewing our analysis and findings with the client on December 3rd, at which time we will also add stories and images of existing facilities, showing successful precedents for many of the ideas coming out of our work.

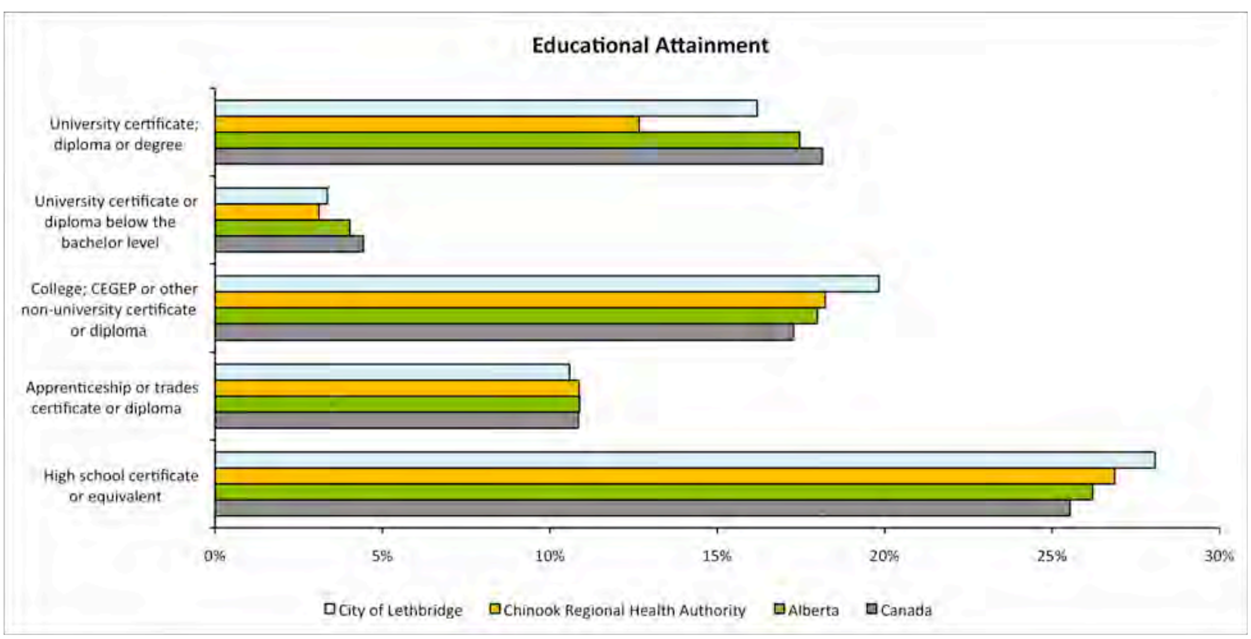
appendix a: market assessment

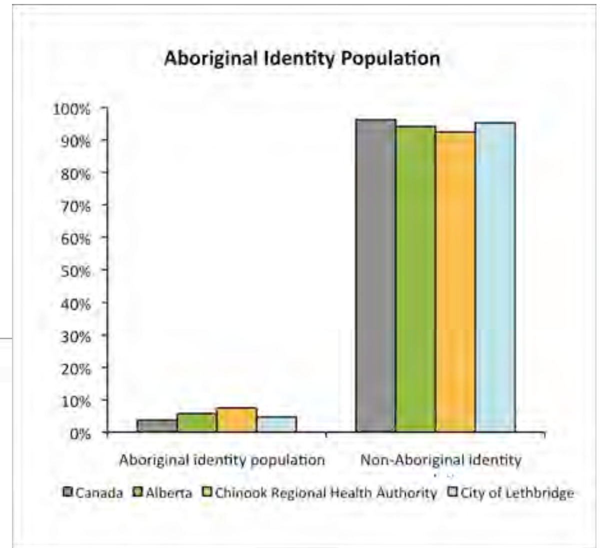


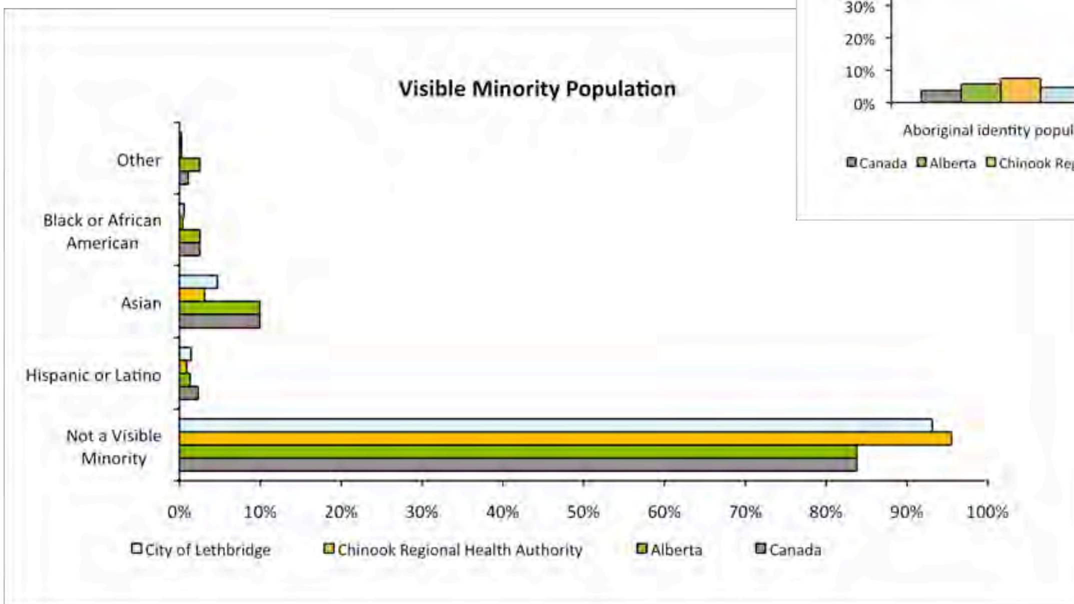

Age Distribution
Age 65+
Age 55 to 64
Age 35 to 54
Age 20 to 34
Age 19 and under
0%
5%
10%
15%
20%
25%
30%
35%
City of Lethbridge
Chinook Regional Health Authority
Alberta
Canada

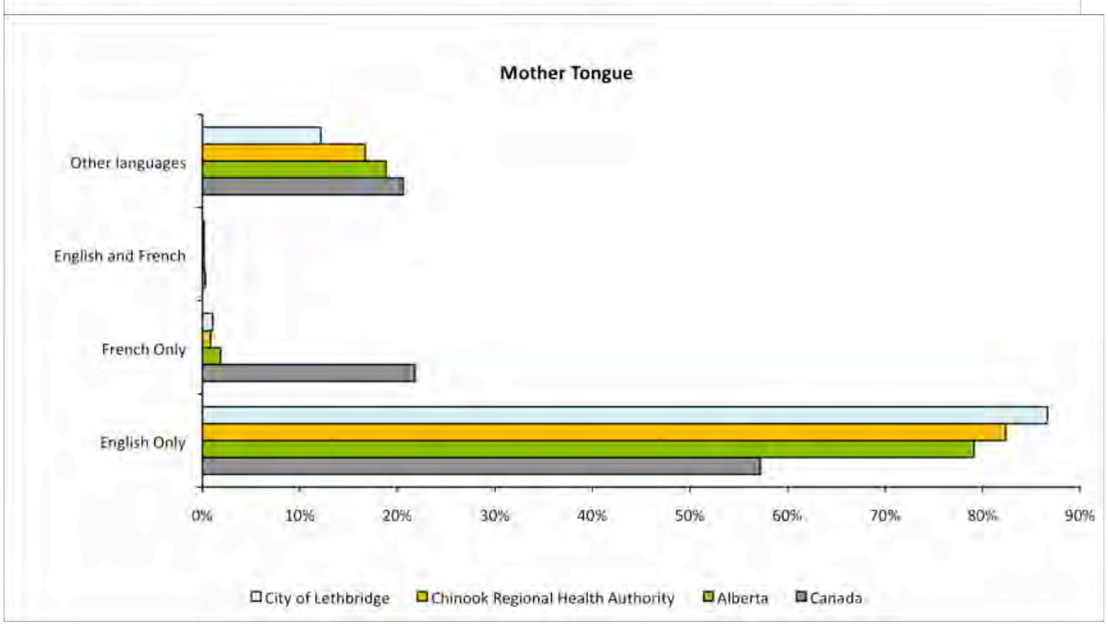

Age Distribution (Young Adult Segments)
Age 30 to 34
Age 25 to 29
Age 20 to 24
Age 15 to 19
0%
2%
4%
6%
8%
10%
City of Lethbridge
Chinook Regional Health Authority
Alberta
Canada

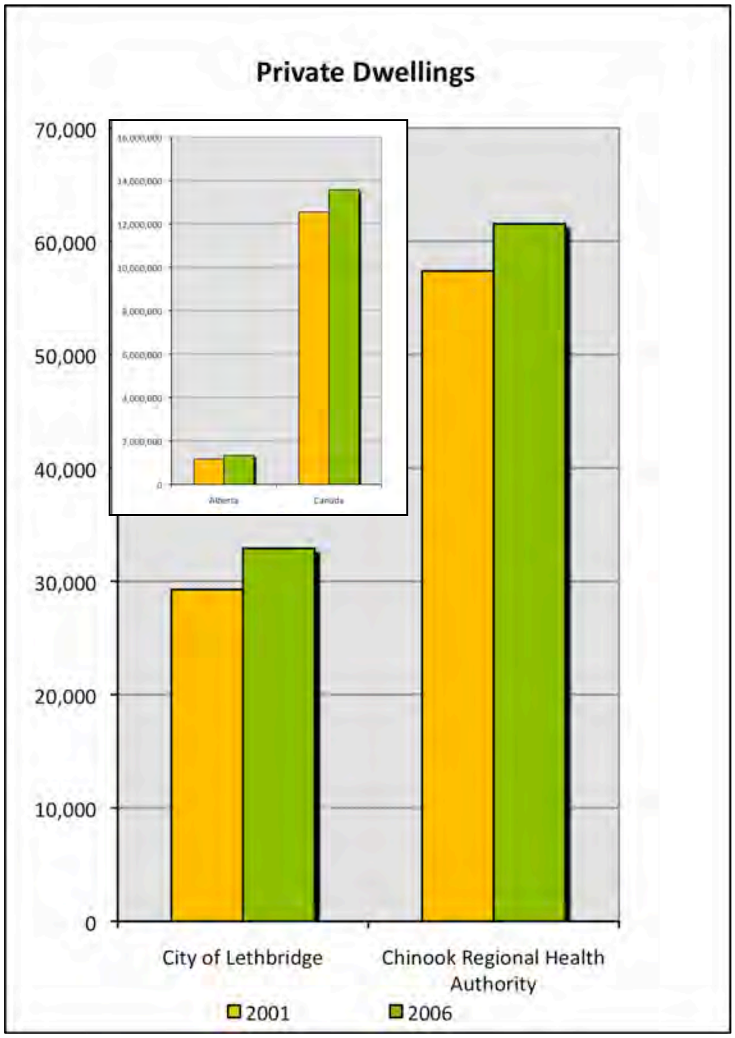

The Market Today: Young and Old Population Segments
30%
25%
20%
15%
10%
5%
0%
Age 55+
Age 19 and younger
Canada
Alberta
Chinook Regional Health Authority
City of Lethbridge

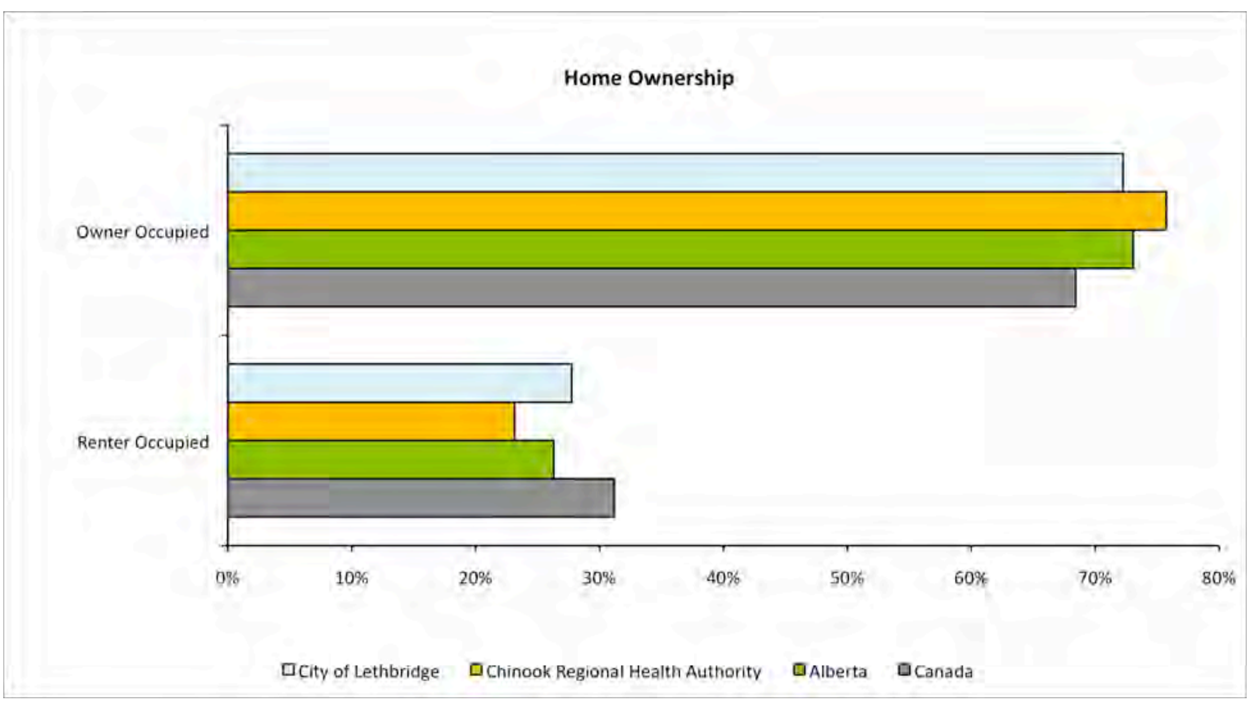

Educational Attainment
University certificate; diploma or degree
University certificate or diploma below the bachelor level
College; CEGEP or other non-university certificate or diploma
Apprenticeship or trades certificate or diploma
High school certificate or equivalent
0%
5%
10%
15%
20%
25%
30%
City of Lethbridge
Chinook Regional Health Authority
Alberta
Canada

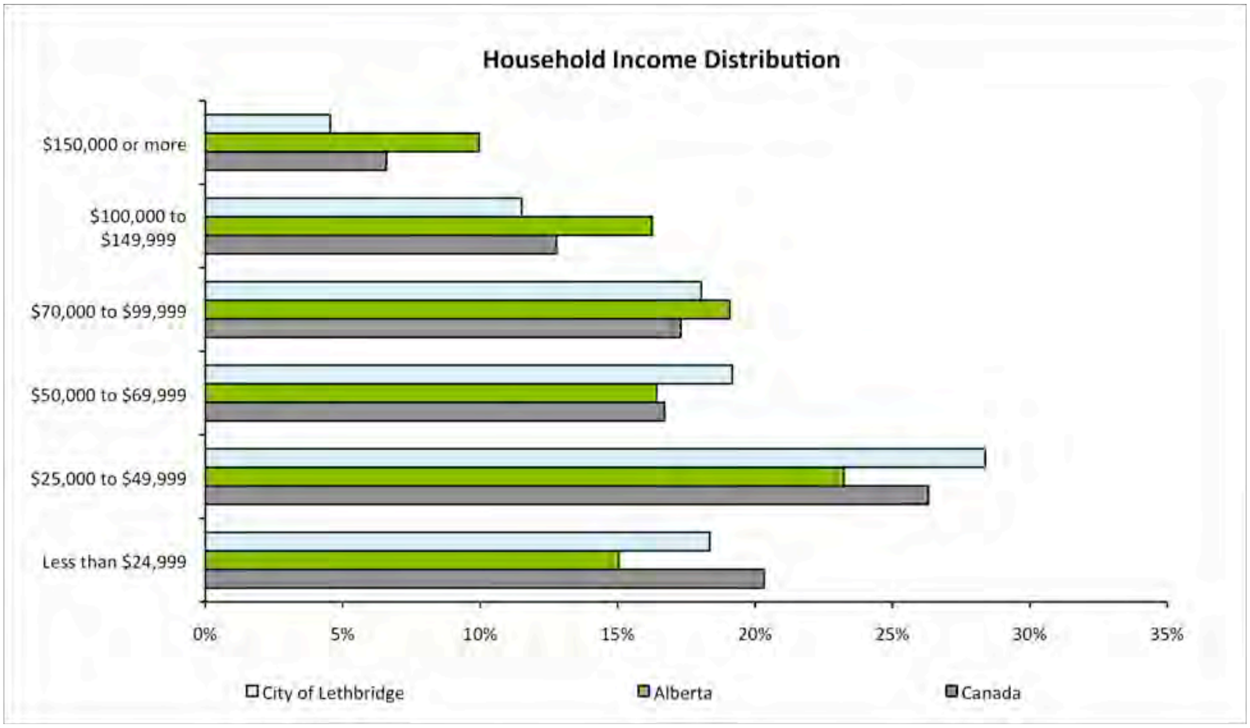

Aboriginal Identity Population
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Aboriginal identity population
Non-Aboriginal identity
Canada
Alberta
Chinook Regional Health Authority
City of Lethbridge

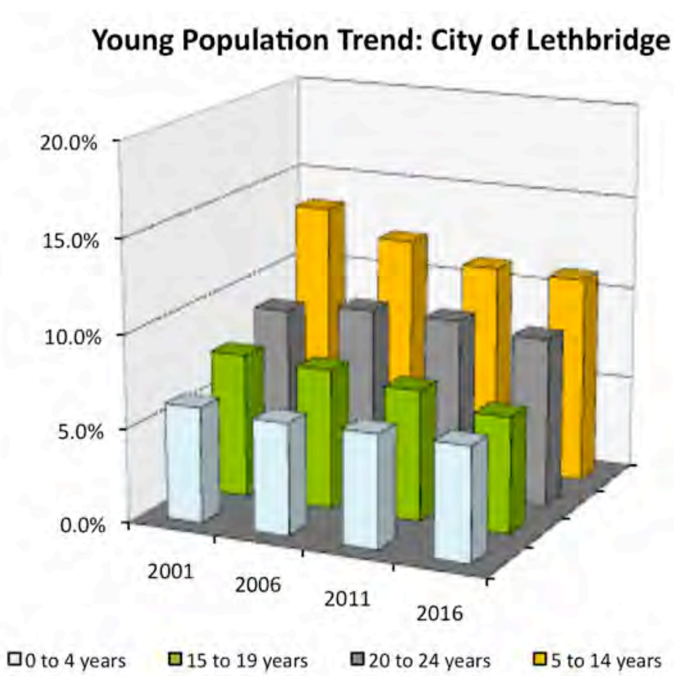

Visible Minority Population
Other
Black or African American
Asian
Hispanic or Latino
Not a Visible Minority
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%
City of Lethbridge
Chinook Regional Health Authority
Alberta
Canada

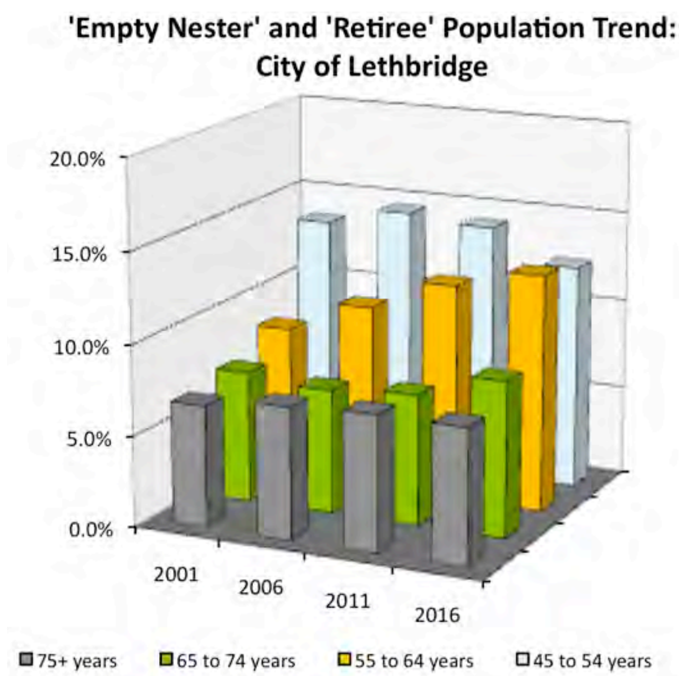

Mother Tongue
Other languages
English and French
French Only
English Only
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
City of Lethbridge
Chinook Regional Health Authority
Alberta
Canada


Private Dwellings
70,000
60,000
50,000
40,000
30,000
20,000
10,000
0
City of Lethbridge
Chinook Regional Health Authority
2001
2006
16,000,000
14,000,000
12,000,000
10,000,000
8,000,000
6,000,000
4,000,000
2,000,000
0
Alberta
Canada


Home Ownership
Owner Occupied
Renter Occupied
0%
10%
20%
30%
40%
50%
60%
70%
80%
City of Lethbridge
Chinook Regional Health Authority
Alberta
Canada


Household Income Distribution
$150,000 or more
$100,000 to $149,999
$70,000 to $99,999
$50,000 to $69,999
$25,000 to $49,999
Less than $24,999
0%
5%
10%
15%
20%
25%
30%
35%
City of Lethbridge
Alberta
Canada


Young Population Trend: City of Lethbridge
20.0%
15.0%
10.0%
5.0%
0.0%
2001
2006
2011
2016
0 to 4 years
15 to 19 years
20 to 24 years
5 to 14 years

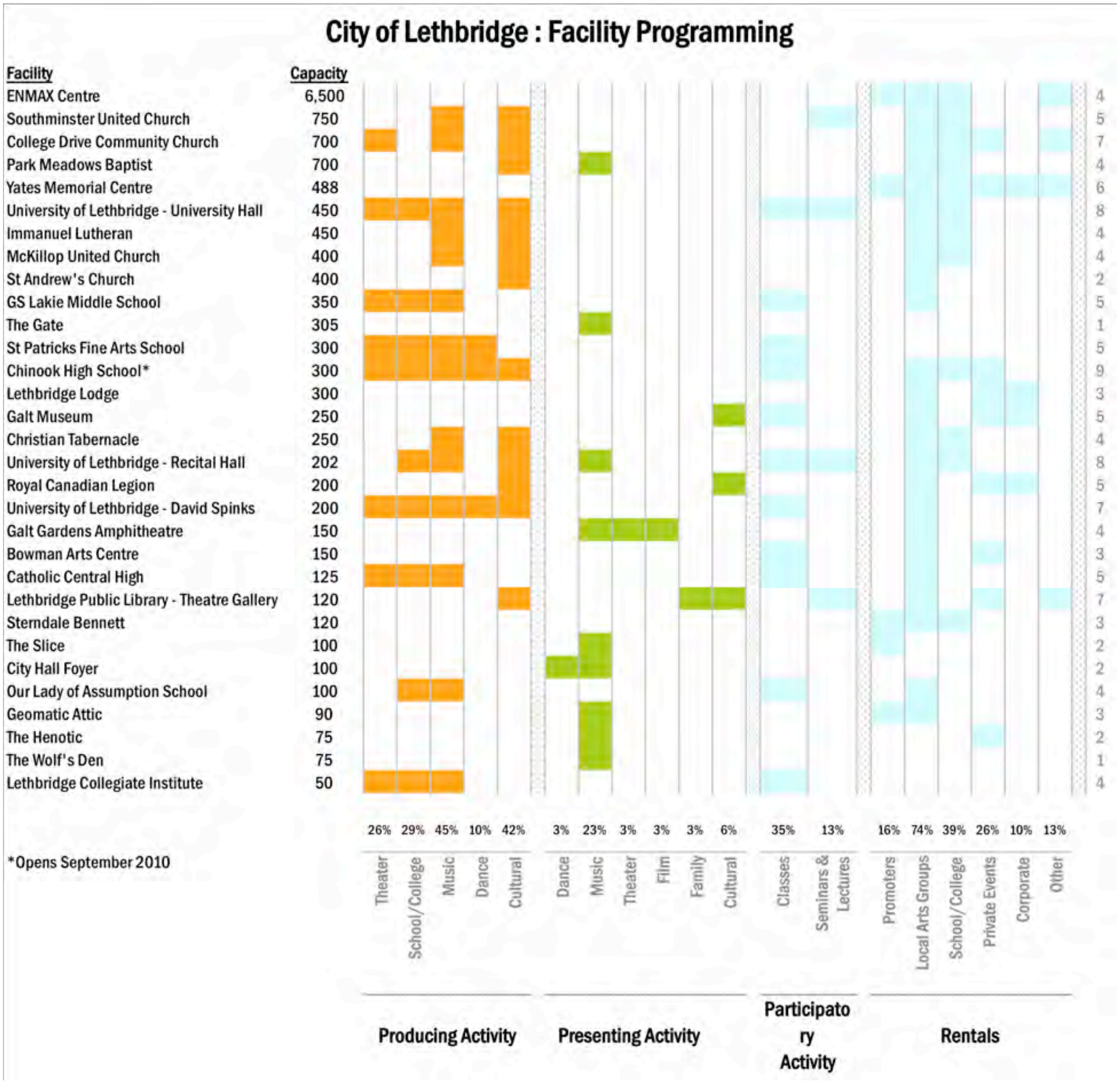

'Empty Nester' and 'Retiree' Population Trend: City of Lethbridge
20.0%
15.0%
10.0%
5.0%
0.0%
2001
2006
2011
2016
75+ years
65 to 74 years
55 to 64 years
45 to 54 years

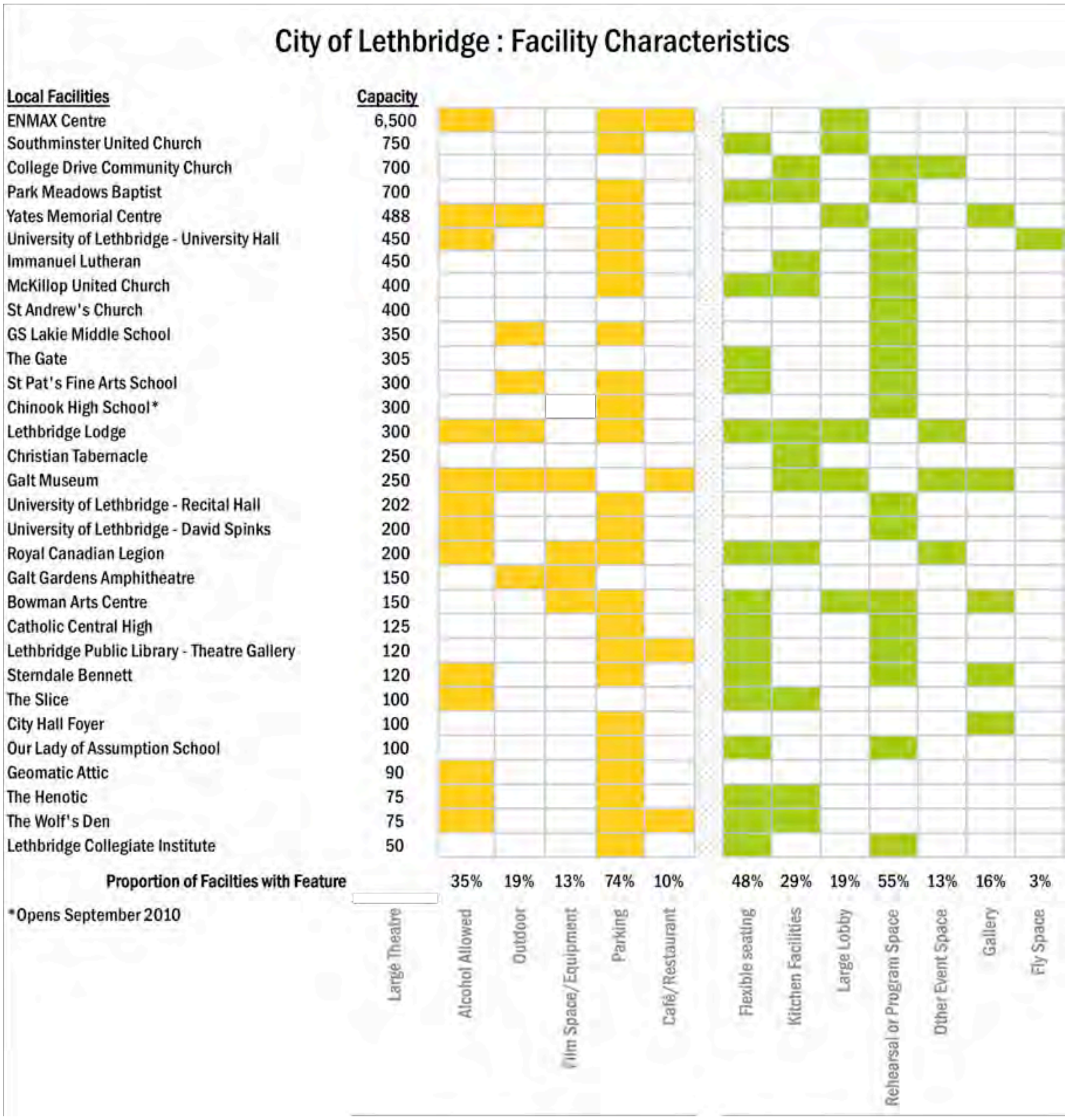
appendix b: facility inventory

City of Lethbridge: Facility Rating

Local Facilities	Capacity	Types of Activity	Building Condition	Staff and Support	Theatrical Functionality	Room Acoustics	Customer Amenities	Performer Amenities	Atmosphere/Character	Suitability for Users	Rating
ENMAX Centre	6,500	3	2	3	1	1	3	2	1	2	2.0
Southminster United Church	750	3	2	2	1	3	1	1	2	2	1.8
College Drive Community Church	700	2	3	2	1	2	2	2	2	2	2.1
Park Meadows Baptist	700	3	3	1	1	2	1	1	2	2	1.7
Yates Memorial Centre	488	3	2	1	3	2	2	2	2	2	1.9
University of Lethbridge - University Hall	450	5	3	3	4	3	2	2	2	2	2.7
Immanuel Lutheran	450	3	2	1	1	2	1	1	2	2	1.5
McKillop United Church	400	3	2	1	1	2	1	1	2	2	1.5
St Andrew's Church	400	1	2	1	1	2	1	1	2	2	1.5
GS Lakie Middle School	350	3	2	1	1	2	1	2	2	2	1.6
The Gate	305	1	2	2	1	2	2	2	2	2	1.9
St Patricks Fine Arts School	300	1	3	1	2	2	1	2	2	2	1.9
Chinook High School*	300	0	4	2	3	2	1	2	2	4	2.6
Lethbridge Lodge	300	3	3	1	1	2	2	2	3	2	2.0
Christian Tabernacle	250	3	2	1	1	2	1	1	2	2	1.5
Galt Museum	250	5	3	3	1	2	3	2	4	2	2.6
University of Lethbridge - Recital Hall	202	6	3	2	2	4	2	2	2	2	2.4
Royal Canadian Legion	200	4	3	1	1	2	2	1	2	2	1.8
University of Lethbridge - David Spinks	200	4	3	3	2	4	2	3	2	2	2.7
Galt Gardens Amphitheatre	150	4	2	1	1	1	1	1	4	2	1.6
Bowman Arts Centre	150	4	2	2	1	2	2	1	2	2	1.8
Catholic Central High	125	4	3	1	2	2	1	1	1	1	1.6
Lethbridge Public Library - Theatre Gallery	120	4	3	1	1	2	2	1	2	2	1.8
Sterndale Bennett	120	4	2	1	3	2	2	2	2	2	1.9
The Slice	100	4	2	2	1	2	3	1	3	2	2.0
City Hall Foyer	100	4	4	3	1	2	1	1	1	1	2.1
Our Lady of Assumption School	100	4	3	1	2	2	1	1	1	1	1.6
Geomatic Attic	90	4	3	3	1	3	2	2	4	2	2.6
The Henotic	75	4	3	2	1	2	2	2	3	2	2.2
The Wolf's Den	75	1	2	2	1	3	2	2	3	2	2.1
Lethbridge Collegiate Institute	50	4	3	1	2	2	1	3	1	1	1.8

*Opens September 2010


City of Lethbridge : Facility Programming
Facility
Capacity
ENMAX Centre 6,500 4
Southminster United Church 750 5
College Drive Community Church 700 7
Park Meadows Baptist 700 4
Yates Memorial Centre 488 6
University of Lethbridge - University Hall 450 8
Immanuel Lutheran 450 4
McKillop United Church 400 4
St Andrew's Church 400 2
GS Lakie Middle School 350 5
The Gate 305 1
St Patricks Fine Arts School 300 5
Chinook High School* 300 9
Lethbridge Lodge 300 3
Galt Museum 250 5
Christian Tabernacle 250 4
University of Lethbridge - Recital Hall 202 8
Royal Canadian Legion 200 5
University of Lethbridge - David Spinks 200 7
Galt Gardens Amphitheatre 150 4
Bowman Arts Centre 150 3
Catholic Central High 125 5
Lethbridge Public Library - Theatre Gallery 120 7
Sterndale Bennett 120 3
The Slice 100 2
City Hall Foyer 100 2
Our Lady of Assumption School 100 4
Geomatic Attic 90 3
The Henotic 75 2
The Wolf's Den 75 1
Lethbridge Collegiate Institute 50 4
*Opens September 2010
26% 29% 45% 10% 42%
Theater School/College Music Dance Cultural
Producing Activity
3% 23% 3% 3% 3% 6%
Dance Music Theater Film Family Cultural
Presenting Activity
35% 13%
Classes Seminars & Lectures
Participatory Activity
16% 74% 39% 26% 10% 13%
Promoters Local Arts Groups School/College Private Events Corporate Other
Rentals


City of Lethbridge : Facility Characteristics
Local Facilities
Capacity
ENMAX Centre 6,500
Southminster United Church 750
College Drive Community Church 700
Park Meadows Baptist 700
Yates Memorial Centre 488
University of Lethbridge - University Hall 450
Immanuel Lutheran 450
McKillop United Church 400
St Andrew's Church 400
GS Lakie Middle School 350
The Gate 305
St Pat's Fine Arts School 300
Chinook High School* 300
Lethbridge Lodge 300
Christian Tabernacle 250
Galt Museum 250
University of Lethbridge - Recital Hall 202
University of Lethbridge - David Spinks 200
Royal Canadian Legion 200
Galt Gardens Amphitheatre 150
Bowman Arts Centre 150
Catholic Central High 125
Lethbridge Public Library - Theatre Gallery 120
Sterndale Bennett 120
The Slice 100
City Hall Foyer 100
Our Lady of Assumption School 100
Geomatic Attic 90
The Henotic 75
The Wolf's Den 75
Lethbridge Collegiate Institute 50
Proportion of Facilties with Feature
35% 19% 13% 74% 10% 48% 29% 19% 55% 13% 16% 3%
*Opens September 2010
Large Theatre
Alcohol Allowed
Outdoor
Film Space/Equipment
Parking
Café/Restaurant
Flexible seating
Kitchen Facilities
Large Lobby
Rehearsal or Program Space
Other Event Space
Gallery
Fly Space

appendix c: interview lists

Oct.09
In-Person Interview Participants

	Contact
City of Lethbridge	
Scott Carpenter	Scott Carpenter
Ken Lowenberg	Ken Lowenberg
Rob Stanford	Rob Stanford
George Kuhl	George Kuhl
Garth Sherwin	Garth Sherwin (City Manager)
Lorna Kurio	Lorna Kurio
Alderman Jeff Carlson	Jeff Carlson (Alderman)
Alderman Barbara Lacey	Barabara Lacey (Alderman)
Gepke Stevenson	Gepke Stevenson (Planner)
Jason Price	Jason Price (Planner)
Tom McKenzie	Tom McKenzie (Police Chief)
Bary Beck	Bary Beck (Director of Planning & Development)
Nicole Mitton	Nicole Mitton (Marketing & Promotions Mngr)
Maureen Gehring	Maureen Gehring (Planner)
Tyson Boylan	Tyson Boylan
Tats Setta	Tats Setta
Doug Hawkins	Doug Hawkins (City Engineer)
Community Contributors	
Terry & Judy Wauters	Terry & Judy Wauters
Catherine & Ralph Thrall Jr.	Catherine & Ralph Thrall Jr.
Howard Cable	Howard Cable
Larry McNamara	Larry McNamara
Ken & Kathy Lewis	Ken & Kathy Lewis
Diana & Ike Lanier	Diana & Ike Lanier
Brad Hembroff	Brad Hembroff
Laura Kenwood	Laura Kenwood
Key Business & Industry Leaders	
Economic Development Lethbridge	Cheryl Dick & Kerry Lowe
Lethbridge Centre (Melcor)	Grace Duff
Lottie Austin	Lottie Austin
Arts Groups - Music	
Bridge City Chorus	Dave Clarke
Southern Accord	Elaine Liebelt
U of L Faculty of Fine Arts	Katherine Wasiak
Vox Musica	Jonathan Dean
U of L Singers	Dr. Janet Youngdahl
U of L Women's Chorus	Joanne Collier
Avanti Choral Association	Jennifer Little
U Of L Jazz Ensemble	David Renter
U Of L Percussion Ensemble	Adam Mason
U of L Global Drums	Adam Mason
U of L Conservatory of Music	Peggy Mezei & Breeanne Fuller
Lethbridge Symphony	Glenn Klassen & Dawn Leite
Lethbridge Registered Music Teachers Association	Christine Rogers
Bridge Brass	Karly Stewart
Artists - Music	
Maureen Furtado	Maureen Furtado
Doran Hoge	Doran Hoge
Brad Brouwer	Brad Brouwer
Shaela Miller	Shaela Miller
Bente Hansen	Bente Hansen
Don Robb	Don Robb
Stephen Graham	Stephen Graham
Artists Groups - Theatre	
Drama Nutz Productions	David Gabert
Empress Theatre Society	Gerard Gibbs
Lethbridge Musical Theatre	Gloria Torrance
New West Theatre	Jeremy Mason (promotion)
New West Theatre	Nicholas Hansen (artistic director)
University of Lethbridge Faculty of Fine Arts	Katherine Wasiak

Artists - Theatre	
Jeremy Mason	Jeremy Mason
Peter Mueller	Peter Mueller
Sheila Matson	Sheila Matson
Fran Rude	Fran Rude
Ed Bayly	Ed Bayly
John Poulsen	John Poulsen
Shelly Scott	Shelly Scott (Associate Professor)
Doug MacArthur	Doug MacArthur
Scott Carpenter	Scott Carpenter
Jeff Carlson	Jeff Carlson
Jory Kohn	Jory Kohn
David Mikuliak	David Mikuliak
Erica Hunt	Erica Hunt
Jeffrey Graham	Jeffrey Graham
Richard Epp (U of L Theatre)	Richard Epp
David Hignell (U of L Theatre	David Hignell
Arts Groups - Dance	**Contact**
Exisdance	Janielle Scott
Expressions Dance	Tamara Malmo
Joy's Dance Factory	Joy Ackerman
Lethbridge Irish Dance Academy	Nadine McGill
Lethbridge Scottish Country Dance Club	Joanna Fraser
Momiji Dancers Society	Pat Sassa
University of Lethbridge - Faculty of Fine Arts	Katherine Wasiak
University of Lethbridge - Ballet Program	Mary Falconer
ULeth Recreation Services	Bill Halma
Artists - Dance	
Lisa Doolittle	Lisa Doolittle
Artists Groups - Visual	
Lethbridge Centennial Quilters Guild	Janet Thompson
Leth. Handicraft Guild of Weavers	Frances Schultz
Lethbridge Photography Club	Dorrit Zacaba
Artists - Visual	
Aaron Hagan	Aaron Hagan
Alexis Bialobzyski	Alexis Bialobzyski
Annette Nieukerk	Annette Nieukerk
Artists Groups - Galleries	
Bowman Arts Centre	Darcy Logan
Southern Alberta Art Gallery	Marilyn Smith
Southern Alberta Art Gallery	Ryan Doherty
Artists Groups - Community Culture	
ACFA Regionale de Lethbridge	Marc-Andre Gignac
Allied Arts Council of Lethbridge	Suzanne Lint (executive director)
Allied Arts Council of Lethbridge	Iona MacKenzie & Lindsay Meli
Bowman Arts Centre	Claire McNab
Blackfoot Canadian Cultural Society	MaryAnn Crow Healy
Education	
Lethbridge School District No. 51	Wendy Fox
Lethbridge School District No. 51 - Drama	Kelly Frewin
Lethbridge School District No. 51 - Dance	Kristi Legge
St. Patrick's Fine Arts School	Shelley Baier
Lethbridge Collegiate Institute	Ken Rogers
Tourism - Assoc. & Destinations	
Chinook Country Tourist Assoc.	Kimberly Lyall
Lethbridge Lodging Association	Bruce Primeau
Galt Museum	Susan Burrows-Johnson
Promoters/Venues	
Gold & Gold Productions	Ron Sakamoto
Enmax Centre	Ashley Matthews
Enmax Centre	Lori
Yates Theatre	Rob Stanford (Head Technician)
University of Lethbridge Theatre	Amanda Berg (Operations Manager)
Mocha Cabana	Larry and Penny Elford
Downtown BRZ	Ted Stilson
Lethbridge & District Exhibition	Rudy Friesen & Bridget Mearns
Southminister United Church	Joan Smith
Media Groups	
CTV	Dory Rossiter

Nov.09
Online Survey Participants

	Contact
City of Lethbridge	
Conrad Westerson	Conrad Westerson
Alderman Jeff Carlson	Jeff Carlson (Alderman)
Community Contributors	
Ken & Kathy Lewis	Ken & Kathy Lewis
Peter & Olive Green	Peter & Olive Green
Arts Groups - Music	
U of L Faculty of Fine Arts	Katherine Wasiak
Vox Musica	Jonathan Dean
Avanti Choral Association	Jennifer Little
U of L Conservatory of Music, Youth Strings	[illegible]
Lethbridge Big Band	Nancy Walker
Lethbridge Community Band	Scott Reiter
Lethbridge Community Band	Edward Grant
Lethbridge Symphony	Glenn Klassen & Dawn Leite
Symphony Women's League	Rose Primachuk
U of L Opera Workshop	Dr. Blaine Hendsbee
Lethbridge Registered Music Teachers Association	Christine Rogers
Lethbridge Buskers Association	Bryan Bradfield
Star Singers	Kim Wallburger
University of Lethbridge, Music	Nick Sullivan
Artists - Music	
Dave McCann	Dave McCann
Doran Hoge	Doran Hoge
Paul Walker	Paul Walker
Artists Groups - Theatre	
Drama Nutz Productions	David Gabert
Empress Theatre Society	Gerard Gibbs
Lethbridge Musical Theatre	Gloria Torrance
New West Theatre	Jeremy Mason (promotion)
Playgoers of Lethbridge	Linda Bayly
Such Players	Lois Punton
University of Lethbridge Faculty of Fine Arts	Katherine Wasiak
Artists - Theatre	
Peter Mueller	Peter Mueller
Sheila Matson	Sheila Matson
Arts Groups - Dance	
Desert Wind Belly Dancers	[illegible]
Lethbridge Irish Dance Academy	Nadine McGill
Lethbridge Scottish Country Dance Club	Joanna Fraser
ULeth Recreation Services	Bill Holmes
Artists - Dance	
Lisa Doolittle	Lisa Doolittle
Artists Groups - Visual	
Lethbridge Centennial Quilters Guild	Janet Thompson
Leth. Handicraft Guild of Weavers	Frances Schultz
Potemkin Collective	Rick Gillis
Southern Alberta Artist's Assoc.	[illegible]
Artists - Visual	
Aaron Hagan	Aaron Hagan
Ian Randell	Ian Randell
Dennis Delaney	Dennis Delaney
Artists Groups - Galleries	
Southern Alberta Art Gallery	Marilyn Smith
Artists Groups - Community Culture	
Allied Arts Council of Lethbridge	James Palmer
Education	
Lethbridge School District No. 51 - Dance	Betty Poulsen
Lethbridge Collegiate Institute	Kim Rogers
Tourism - Assoc. & Destinations	
Galt Museum	[illegible]
Media Groups	
L.A. Beat	Richard Amery

Nov.09
Phone Interviews

	Contact
Arts Groups - Music	
Lethbridge Community Band	Edward Grant
U of L Opera Workshop	Dr. Blaine Hendsbee
University of Lethbridge, Music	Nick Sullivan
Artists - Music	
Stephen Graham	Stephen Graham
Artists Groups - Theatre	
Lethbridge Musical Theatre	Gloria Torrance
Artists - Theatre	
Gail Hanrahan	Gail Hanrahan
Jeffrey Graham	Jeffrey Graham
Richard Epp (U of L Theatre)	Richard Epp
Artists Groups - Visual	
Lethbridge Photography Club	[illegible]
Lethbridge Handicraft Guild	[illegible]
Artists - Visual	
Dennis Delaney	Dennis Delaney
Education	
51 Alternative School	[illegible]
Promoters/Venues	
Esplanade (Medicine Hat)	Carol Beatty
Enmax Centre	[illegible]

Business Plan for New Performing Arts Facilities

Prepared for the Ferrari Westwood Babits Architects

April 2010

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1. introduction

Having established the need for new performing arts facilities in Lethbridge, Webb Management Services has now proceeded to the development of a preliminary business plan that suggests how new facilities should be programmed, operated and sustained, addressing the following questions and issues:

- How can the use of the facility be appropriately balanced between resident arts groups, Centre-presented events, non-profit users, private events and commercial arts events?
- What is the appropriate balance of earned and contributed income that will sustain operations of the Centre? And what should the City's contribution be?
- How should the Centre be governed, operated and staffed?
- Given the market research completed in the needs assessment, what are the appropriate audience estimates and projections for the Centre?

In the following chapters we will respond to these questions, leading to pro-forma operating budgets that forecast how new facilities will perform financially and what impacts they will have on the local and regional economy.

2. mission, vision and goals

When we began our work in Lethbridge, we asked study participants questions around what purpose the new building should serve. Following is a list of overarching themes.

New facilities are needed to:

- Respond to the desires of local and regional audiences.
- Provide suitable facilities for national and international touring performing arts groups.
- Support the efforts of promoters and presenters to bring more commercial arts entertainment to Lethbridge and the region.
- Provide facilities for local arts organizations.
- Build the regional profile of Lethbridge as an arts and cultural destination.
- Advance the region's cultural, economic and community development goals.

Ultimately, the building will fulfill different parameters for each group or individual. But to the extent possible, the building should accomplish these goals by serving multiple purposes, potentially as a destination and community space. Given the diversity of needs and opportunities, it is clear that the building should have a more precise set of operating goals:

- New facilities should be as busy as possible with a wide range of programs serving local, regional, and visiting audiences.
- Spaces should support growth of local arts organizations and educational programs while remaining accessible and affordable.
- The Centre should present cultural and entertainment programs of touring performing artists and entertainers in service to the interests of Lethbridge residents and the regional population, fulfilling the demand for high-quality programs in the community.
- Annual funding requirements for the Centre, including the City's contribution, should be both achievable and sustainable.

Each one of these sounds relatively straightforward and viable. It is the combination that presents a series of challenges to facility managers in the day-to-day operation of facilities.

3. comparable projects

To inform our operating recommendations, we indentified and researched four comparable performing arts facilities whose history, policy and operations provide important context for this planning process. Following is a short description of the four facilities studied for this effort; detailed descriptions are provided in Appendix A.

1. **River Run Centre, Guelph, BC**
   Constructed in 1997 on the site of a former speed skating rink, the River Run Centre houses two theatres and a large lobby. On the 785-seat main stage, the Centre presents a variety of events including dance, theatre, music and comedy. The 225-seat multipurpose room is utilized for education, youth programming, and as a low cost venue for local performing arts organizations. The lobby is utilized for events and can hold up to 500 people. Owned and operated by the City of Guelph, the Centre has a $2.1 million budget, of which 76% is earned income.

2. **Winspear Centre, Edmonton, AB**
   The creation of this state-of-the art facility can be attributed to the efforts of ambitious Edmonton citizens working over twenty years. A generous donation of $6 million from Dr. Francis G. Winspear, and $15 million each from federal and regional government were major factors in realizing this $45 million facility. The remainder of the capital funding was brought in through fundraising initiatives throughout the community. Operations of the Centre recently transition from the foundation to the Symphony Orchestra. Programming in the Centre is focused on music, though the Centre also hosts dance concerts, and youth oriented programming. It has an annual budget of approximately $4.5 million, of which 56% is earned.

3. **Esplanade Centre, Medicine Hat, AB**
   The Esplanade Centre arose out of a perceived need for a theatre in Medicine Hat, Alberta, during a time when the city was considering a new space for its museum and archives. The $42.1 million Centre serves as a cultural hub for a variety of activity organized around the theatre and the museum. The Esplanade is owned and operated by the city of Medicine Hat. The Theatre at the Centre has an annual operating budget of $2.2 million.

4. **Port Theatre, Nainamo, BC**
   After 40 years of separate local initiatives, the Port Theatre Society was formed in 1989 with the purpose of raising funds for an 800-seat theatre on the waterfront of Nanaimo, BC. Over time, the Society was able to raise enough money to leverage support for government funds. Today the Theatre is operated by the Society in the employ of the City. The City is responsible for structural upkeep and the Society takes care of all internal repairs. Most of the 250 events in the Port Theatre are outside rentals, though the Society has secured a grant that enables it to present a series of 20 to 25 performances annually thanks to its focus on presenting work by

Canadian artists. The annual budget for the theatre is $1.8 million, with 25% derived from earned income.

The performing arts facilities examined represent a variety of governance and funding structures. A number of trends and patterns emerged from this research.

- Two of these venues are city run, and foundations operate two. There is notable government support for each facility, either through structural upkeep, operating support or facility management.
- River Run Centre has large levels of diverse programming, which could be linked to its high percentage of earned income. Additionally Port Theatre is looking to diversify its programming through the establishment of a family oriented series. The Winspear is focused almost entirely on music and rarely sells out.
- Conversations with facility managers who operate City-run facilities suggest that City infrastructure is not always prepared to accept a high volume of charitable contributions, particularly from individuals. In the case of the Esplanade Centre, a new partnership with the local community foundation has allowed for the Centre to establish an endowment, solicit contributions and participate in estate planning.
- Staffing levels at these facilities are also quite variable. Staff sizes range from 12 to 30 FTE staff. At each facility, there is one senior position responsible for the management and operations of the facility, including a General Manager, Manager of Cultural Development or Managing Director.
- The Winspear was receiving the least amount of government assistance and had difficulties covering expenses. Recently, the facility was taken over by the Symphony Orchestra, which has more stable economic footing, and receives more government funding than the venue did on its own.
- Facilities have annual operating budgets that range from $1.8 million to $4.5 million. Additionally, earned income derived from ticket sales, rental fees, users fees, program fees and food and beverage service is quite variable; the percentage of earned income covering operating expenses ranges from 10% to 74%.
- Interviews with personnel from the Esplanade Centre indicate that theatre revenue can vary from one year to the next. Factors that can influence theatre income include weather, programming choices on part of local arts organizations and presenters, and other occurrences beyond the control of building management (for example, the H1N1 epidemic).

4. programming the Centre

The most important challenge around the operations of the Centre concerns how it is programmed and animated.

In January, we held a series of meetings at Lethbridge City Hall, described as scheduling charrettes. In two group meetings, we invited potential users to come together and discuss how facilities would be operated. We asked each group to consider how they would use the two spaces in the Centre as well as the Yates Theatre, and how the Centre should be managed to support their needs. Following are summaries of those two sessions.

Scheduling Charrettes

Members of the consulting team as well as possible users of the facility attended the scheduling charrettes. Additional information was gathered by phone from representatives of groups that had expressed demand for new facilities in the first phase of work but were unable to attend the scheduling charettes. In sum, eighteen organizations expressed an interest in utilizing new performance facilities.

With these groups, the focus of the discussion was on how and for how much local arts organizations should be able to access new facilities. Here are some of their more pressing concerns:

- Will facility rental fees and technical labor be affordable for users?
- What food and beverage services will be available in the building?
- Will users have to pay for access to a ticket office run by the building and how will ticketing functions work?
- Will educational users receive preferential rates, as they do now in the Yates?
- Who will operate the facility?
- Will the building have full-time technical staff and an internship program?

There is good news and bad news associated with these questions and concerns. The bad news is that community arts groups have already gotten past the euphoria of imagining new facilities, and are already sounding like aggrieved tenants. But the good news is that they are thinking practically about how they would use new spaces, while considering the financial implications of new and better spaces on their programs and budget.

Good news is also found in the fact that these groups embrace the idea of a set of resident community arts and educational groups who gain access to new facilities based on some combination of the strength of their commitment to the project, the value they provide to the community, the level of use of facilities, and the quality of the work they present.

With this group, we laid out blank calendars for the Centre's 250-seat Recital/Rehearsal Hall, 1,250-seat Theatre and the Yates Theatre. The calendars were said to begin at the opening year of the Centre, (assumed to be September 2013) and extended through that first year of operation.

Here is a summary of their proposed utilization:

Estimated Utilization By Local Groups						
	250-seat Recital/Rehearsal Hall		1,250-seat Theatre		Yates Theatre	
User Group	Perf	Reh	Perf	Reh	Perf	Reh
Desert Wind	2	--	--	--	--	--
Exisdance	--	--	3	2	4	2
Lethbridge Community Band Society	3	--	5	--	--	--
Lethbridge Musical Theatre	--	--	8	8	--	--
Lethbridge Photo Club	2	--	--	--	--	--
Lethbridge School District	3	--	10	8	22	15
Lethbridge Scottish Country Dance Club	2	2	--	--	2	2
Lethbridge Symphony Orchestra Master Series	--	--	16	39	--	--
Lethbridge Symphony Orchestra Chamber Series	5	5	--	--	--	--
New West Theatre	--	--	--	--	51	13
Playgoers of Lethbridge	--	--	--	--	4	5
Southern Alberta Art Galery	14	--	--	--	--	--
University of Lethbridge - Conservatory	29	26	5	2	--	--
University of Lethbridge - Music	--	--	17	25	--	--
University of Lethbridge - Opera Workshop	--	--	7	10	--	--
University of Lethbridge - Other Uses & Users	16	27	--	--	--	--
University of Lethbridge Singers	--	--	6	6	--	--
Vox Musica	--	--	2	2	--	--
	76	60	79	102	83	37

The calendars developed in these charettes suggest reasonable levels of utilization in both the Centre and the Yates Theatre. Electronic copies of these calendars are appended to this report in Appendix B.

Overall, we found the charrettes to be a beneficial exercise. A number of positive themes emerged from the process:

- Despite the prospect of higher rents and user fees, they remain positive about access to facilities.
- There is significant demand for both spaces in the Centre.
- Groups are curious about the possibilities of the using the City's Ticketing Centre as a box office solution, but are concerned about ease of use and higher ticketing fees.
- Groups represent a good mix of the disciplines, and even if some of them drop away before the building opens, it is quite likely that others will emerge to take their place. Notably, University programs and events are key users of space.

Programming Plan

The strength and the challenge of the Centre from an operating perspective is that it will be animated in a number of ways, including:

1. **Live Touring Events:** Buying and presenting touring arts and entertainment programs will be an important element of the Centre's programs. Presenting live touring events can support the

mission of the building by providing Lethbridge residents and visitors the opportunity to see and hear regional, national and international artists. Presented events can also have a direct and positive impact on marketing the Centre to users and audiences. In addition, the number of presented events need not overwhelm the use of any particular space in the Centre. The challenge with presenting is having the ability to choose and access the right shows and promote them effectively such that a small set of performances has a large and positive impact.

2. **Facility Presented Film:** In addition to presenting live events, the facility will also program films that support mission-driven programming and events. Film events appeal to younger audiences and the community as affordable and accessible experiences. Presented film events occur in each programmable space at the Centre, and would generate revenue from ticket sales and concessions.

3. **Community Rentals:** Per the charettes, we see significant outside demand for facilities from amateur and professional organizations, educators and institutions, producing and presenting theatre, music, dance and other cultural programs.

4. **Private & Corporate Events:** As an event space, the Centre's sizeable lobby, unique setting, on-site amenities and large gathering spaces make it appropriate as a meeting and event space. Thus, the Centre should be marketed to the community as an ideal space for weddings, meetings and fundraisers.

5. **Commercial Arts Event Rentals:** Occasionally, outside presenters and promoters may express an interest in renting facilities for commercial arts event rentals. The Centre should be well positioned as an attractive and viable facility for outside users. As a venue, the Centre should be marketed as distinct from the ENMAX Centre, suitable for traveling theatrical programming, intimate music performances and more.

All of these elements of programming are important to the life of the Centre. Each one will develop at a different pace, and each one is served by different physical spaces in the Centre. But there will be conflicting needs for space, and there will be seasonal peaks and valleys in demand. Managing these forces will thus become the most important part of the job of the head of the Centre.

5. operating the centre

Governance Options

There are several different models that describe how performing arts facilities are governed and operated.

1. **Non-profit-run** facilities are operated by independent non-profit corporations, and are also usually registered by the Canadian Revenue Agency as charitable organizations. These entities are created for the specific purpose of operating new facilities, and have an educational mission to support cultural activities and promotion of the arts. These organizations vary in size and focus, acting as producers, presenters or as service organizations facilitating the activities of other groups. Often it is some combination of the three. In all cases, these organizations are mission-driven. The benefit of this model relates to its orientation towards public service and education. As non-profit organizations, their operations are relatively transparent, which allows for greater public accountability. As mission-driven organizations, they often have significant community impact, including arts education and outreach programs. The organization's status as a charitable organization also allows for a strong fundraising infrastructure, which can reduce their reliance on earned revenue and provide greater curatorial flexibility; this flexibility can ultimately benefit the quality and availability of arts programs in the community.

   The most significant downside of this operating model is the lack of a guaranteed source of contributed income. Non-profit-run facilities must compete each year with a range of charitable organizations in the non-profit sector. With fluctuations in the economy and in the policies and commitment of philanthropists and corporate sponsors, this model may not be the most viable approach to ensuring long-term stability of operations in certain communities.

2. **User-run** facilities represent a slight variation on the non-profit-run model. Here we have the principal users of the facility as the operator, as opposed to a non-profit created specifically for the purpose of operating the facility. This is an attractive model when there is one user that dominates the hall or complex. Located in Edmonton, the Citadel Theatre is an example of a producing theatre company that operates its own facilities.

3. **Government-run** facilities are generally managed by a department or agency of a local government or municipality. They are often managed as part of a larger portfolio of publicly accessible facilities. By-and-large, government-run venues operate as rental facilities, making performance venues available to local cultural organizations and for local and regional presenters to bring touring activity to the market. The principal benefit of a government-controlled operation is the relative guarantee of public funding to support ongoing operations. The vehicle for such support may vary, including taxes, hotel/motel tax funds and/or line-item budget allocations, but the assurance of annual public sector support provides a significant operating

cushion. Management's orientation toward public service can provide significant benefits to local cultural organizations in terms of cost and scheduling. And access to resources that often extend to the operation of other facilities can also help keep costs down. The local example of this model is the Yates Memorial Centre, operated by the City of Lethbridge.

Often, cultural facilities are governed and operated through a combination of one or more of these scenarios. We'd also offer the following models of unique operating models of Lethbridge organizations. Both the Galt Museum and the Allied Arts Council manage facilities. And Economic Development Lethbridge provides key programs and services to the community. Following is a summary of each of these entities and their relationship with the City:

1. **Allied Arts Council of Lethbridge** is a not-for-profit charitable organization founded in 1958 that is governed by a Board of Directors. In the mid 1960's, Allied Arts became the manager of the Bowman Arts Centre, which is City owned. The relationship and Allied Arts' administration of the Centre is defined by a service agreement with the City of Lethbridge and is renegotiated every three years. Approximately 5 to 6 years ago, Allied Arts assumed an additional responsibility, and now receives a fee-for-service specifically for arts leadership. Allied Arts is now regarded as "an arms length coordinating body for arts organizations." This additional fee allows the Council to coordinate, facilitate and promote the arts in Lethbridge. As a result, the Council has transitioned from being the operator of the Bowman Arts Centre to being the representative and advocate for the Lethbridge Cultural Community. Notable governance characteristics are as follows:

   - Personnel at the Council and Bowman Center are not City employees or union employees, which provides a cost savings.
   - There is a cost efficiency for the Allied Arts Council to act as Lethbridge's key arts service organization and also continue to operate the Bowman Arts Centre (i.e. shared administrative staff and functionality)
   - The City handles major renovations to the Bowman Arts Centre, particularly when safety is an issue. For example, the City recently installed a new motorized lift. Allied Arts Council is responsible for most other facility expenses, including utilities.
   - Bowman Arts Centre staff report to Allied Arts staff, who are responsible for hiring and monitoring senior personnel.
   - Allied Arts Council does some fundraising, generally for projects or special events.
   - A fee-for-service is negotiated between Allied Arts and the City every three years. Funding is provided through the City's general fund.

2. **The Galt Museum** is operated by an arms length committee of City Council of the City of Lethbridge, governed by a City Council appointed Board of Directors. The City also owns the Galt Museum facility. Within City government, there are three entities that operate as a board or a committee, including the Galt Museum, library and police department. In 1998, the Museum was put at arms length by by-law. Budgeting and revenue flow through the City's budget, including grants, gift store revenue and admission fees. Notable governance characteristics are as follows:

- Personnel at the Galt Museum are City union employees, although there are less manager positions. For 21 employees, there is only one manager position.
- The Galt Museum accepts charitable contributions, and runs an annual giving campaign and has a giving committee. The Museum works closely with the community foundation and the Friends of the Galt Museum Society.
- Budgeting and financial procedures for the Galt Museum must follow City accounting standards. However, the Museum does not have support staff that many City departments enjoy to assist with this process.
- If a major capital improvement is required, the Galt Museum will fundraise for these repairs and upgrades. For example, the Galt Museum recently improved acoustics within an area of the facility, and successfully fundraised to offset the cost.
- Although the Museum has funding set aside by City Council, there is some risk that these funds could be reallocated elsewhere, if necessary.

3. **The Lethbridge Economic Development Initiative Society, (operating as Economic Development Lethbridge)** is an arms-length independent not-for-profit organization managed by a 25-member Board of Directors. Established by the Societies act in 2003, the formation of LEDI was the result of a successful campaign led by the chamber of commerce, which advocated that economic development initiatives couldn't be managed by an entity that was both a marketer and a regulator. Previously, economic developed initiatives were managed through the Lethbridge City government. Notable governance characteristics are as follows:

   - The Board is Directors is diverse and includes appointed and elected members. Appointed directors include the Mayor, one Alderman, the City Manager, representatives from the Chamber of Commerce, College, University and County as well as community members that represent seniors, the Environment, Multi-Culturalism and Aboriginals. Fourteen elected representatives represent key industries in Lethbridge and the region. With the exception of the Mayor and City Manager, appointed Directors serve a term of one year and elected members serve two years. The result of this policy has created strong ties in the community and ensures a diverse Board of representative of the community.
   - LEDI staff are employees of the not-for-profit organization. LEDI personnel work closely with a City liaison, and have a strong working relationship with the City.
   - Having a regional focus, LEDI has been able to leverage City funding (30 to 50 cents on every dollar of the City's investment) with other funding partners, including the County of Lethbridge and private partners. The not-for-profit also receives financial support from the Province and federal sources.
   - As an independent entity, LEDI is able to "move at the speed of business" as opposed to bureaucracy. The not-for-profit also has a governance board instead of an operations board, and a CEO (instead of an Executive Director).

- The City approves LEDI's funding for a three-year period. The LEDI CEO prepares and presents a semi-annual report to County Council.
- Economic Development Lethbridge has its own administrative offices, but the City does provide use of storage facilities.

Governance Recommendations

Noting the three key models presented above, we would recommend a governance structure that positions the City as the owner of facilities, and establishes an arms-length committee of City Council as the operator. The recommend this governance structure for the following reasons.

- The City's existing infrastructure and resources present opportunities for shared services, particularly the City of Lethbridge Ticketing Centre, food and beverage service, IT support and network of event-based personnel. As an arms-length committee, the Centre could utilize some of the City's resources, when appropriate.
- Recognizing that City is likely to provide significant financial operating support, a facility operated by an arms-length committee would limit the City's risk and safeguard public resources, ensuring that funds are managed properly and transparently.
- As an objective entity, an arms-length committee would guarantee that facilities are accessible to the local cultural community.
- As an independent entity, the Centre would focus on fulfilling operating goals and supporting arts organizations, arts education students and audiences.
- The City would retain ownership of the building and property.

Additionally, project leadership should establish a foundation that is a charitable organization with the mission to support Centre operations. The foundation could be established in support of the Centre's capital campaign, and can be useful once the building is up and running, potentially playing the following roles:

- Managing the ongoing effort to raise money from the private sector to sustain operations of the Centre.
- Establishing a membership program for individuals, and managing fundraising for sponsorship opportunities, potentially naming rights for the facility.
- Holding the license to serve alcohol in the Centre.

Staff Development

Here are job descriptions for key positions, compensation for which is set in the following section.

> ***Executive Director:*** The manager of the Centre, responsible for administering the facility on a day-to-day basis, overseeing operations and staff, overseeing a professional presenting series, preparing annual budgets and capital improvement plans, monitoring performance, overseeing all programs and rentals, negotiating supplier contracts and coordinating with other City

departments to maintain the physical plant. Marketing the facility to audiences, users, and other elements of community leadership will be a particularly important duty, as it relates to both audience development and fundraising. The Executive Director of the Centre will also be responsible for managing the charitable foundation. We would suggest that this position should be filled at least one year before the facility opens, to assist with planning, construction, commissioning, and preparation for operations.

Development Director: Reporting to the Executive Director, key responsibilities for the Development Director will include the planning, implementation and oversight of activities that attract contributed income. This includes annual fund development, corporate and individual underwriting, and special fundraising events. Specific duties include: cultivate, develop, manage and maintain relationships with donors; plan and administrate special fundraising events as needed; solicit and manage volunteers and staff in executing fundraising activities; oversee solicitation and acknowledgment process; recommend fundraising policies and procedures to the Executive Director; support the Executive Director in managing the charitable foundation; oversee the grant writer and grant applications to federal and provincial government agencies that provide arts funding; conduct prospect research and develop applications for private foundation and corporate arts grants (including any sponsorship). This position should be in place at least one year before the building opens.

Programming Director: Responsible for the day-to-day planning and delivery of programs in the Centre, including the scheduling of all programmable spaces, the booking of presented programs and the coordination of rental events. Particularly important are those skills related to finding, negotiating and promoting the presenting program. This staffer should be in place at least one year before the opening of the Centre, reporting to the Executive Director.

***Marketing Director*:** Primarily responsible for the marketing and promotion of events to be presented in the Centre, including the development of promotional materials, media buying, public relations and publicity, and the use of various online marketing tools. The other part of the job is supporting the marketing efforts of renters. This we see as a critical function in order that these other users of the Centre are able to reach audiences and sell tickets, thus ensuring their ability to pay rent for access to these facilities. The position also reports to the Executive Director and should be in place one year before the building opens.

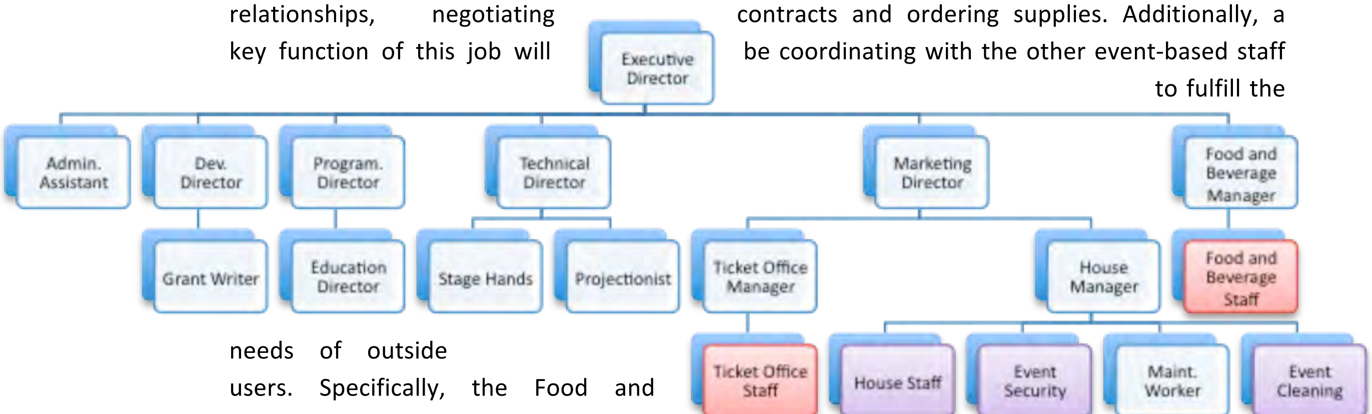
Technical Director: This individual is in charge of backstage operations of performance and rehearsal spaces, and the technical aspects of production in the facility. He/she is charged with backstage maintenance, the safe and responsible use of stage equipment and facilities, scheduling all crew calls including load-ins, changeovers, show calls and load-outs, and coordinating with front of house activities. The position requires experience with stage, sound, lighting, mechanical rigging and electronics systems, as well as theatrical equipment set-up, operation, and maintenance. The position should be in place at least one year before the building opens.

Ticket Office Manager: This position runs the ticket office and is accountable for a high daily volume of cash and credit transactions, working closely with the Marketing Director to prepare daily audit reports and maintain accurate records and account balances. The position also works closely with renting organizations to coordinate their ticketing needs. This staffer should be on the job at least six months before the Centre opens.

House Manager: This is full-time position responsible for recruiting, training and mobilizing ushers and ticket takers for events in both spaces. A strong orientation to customer service training is required, as is the ability to train and motivate paid and volunteer staff to deliver a high level of service at events. This position should be in place six months before the Centre opens.

Education Director: This full-time position is responsible for the design and execution of various arts education programs and events that enrich the audience and resident experience, potentially artist talkbacks, master classes, pre-concert events, in-school artist visits and more. The Education Director will work closely with local arts organizations and touring artists to develop these programs. The position will also play a critical role in fundraising in support of arts education, and in developing close working relationships with the Lethbridge School District, the University of Lethbridge, Lethbridge College and the Holy Spirit Roman Catholic Schools. This position should be in place one year before the Centre opens.

Food and Beverage Manager: The full-time position is responsible for managing food and beverage operations at the facility, overseeing food and beverage staff, maintaining vendor relationships, negotiating contracts and ordering supplies. Additionally, a key function of this job will be coordinating with the other event-based staff to fulfill the needs of outside users. Specifically, the Food and Beverage Manager will work with local arts organization, non-profits, commercial arts presenters, corporations and individuals holding private events for performances and special events to establish their need for food and beverage services, including event-based catering, concessions for performances, and backstage catering. This position should be in place six months before the Centre opens.



Organizational Structure: We would recommend the following structure for the organization of staff and leadership. Full-time positions are highlighted blue, part-time positions are highlighted red, and contract labor positions are highlighted purple.

Other Elements of Operating Policy

Utilization and Access*:* The key to success for the Centre is to make it as busy as possible with the range of programs and activities described in the previous chapter. Here, the challenge is managing demand and scheduling multiple programmable spaces. In that regard, we would stress the following:

- Policies should address use on the part of presenters and presenting programs, resident programs, and outside users.
- Explicit policies must be in place on how facilities are booked, including how far in advance dates can be secured, rental rates, scheduling priority, cancellation fees and other charges.
- Rental rates should be scaled to favor some combination of local arts organizations, educational institutions and non-profit groups as renters.

Resident Organizations: We would recommend that a group of community-based arts organizations and educational institutions have the opportunity to seek classification as resident organizations. Resident groups gain preferred rental rates and status for booking in exchange for bringing a certain amount of activity and benefit to the venue. These groups can guarantee a relatively consistent level of activity to attract users, audiences, and other visitors and build an image of the facility through consistent use, supporting ongoing marketing and fundraising efforts. At the scheduling charrettes, arts and education users of current City-operated facilities expressed an interest in a similar policy for new performing arts facilities.

We generally favor a process where organizations qualify as residents through an open application process. In such a process, the criteria by which these organizations are selected should be published, and might include some of the following:

- ***Level of programming*****:** The organization agrees to bring a significant portion of their annual activity to the facility. Specific levels of use may be required within policies and criteria for resident groups.
- ***Mission*****:** The organizational mission is worthy and consistent with the goals of the Centre and the City.
- ***Quality:*** The organization creates work of quality (however that is defined) that will enhance the image and reputation of the facility.
- ***History:*** The organization has a track record of growth and financial stability.
- ***Organizational Development:*** The organization has made a commitment to organizational development that will bring their administrative skills and resources to a high level.

Ticketing: In our scheduling charrettes, outside users were anxious about the prospect of having to use a complicated and expensive ticketing system. But there simply is no other option for the building – it must have a sophisticated system that can sell seats, track inventory and manage cash. Conversations with City personnel indicate that that the City of Lethbridge Ticketing Centre is capable of providing ticketing services for the Centre. And utilizing the existing infrastructure is an excellent solution likely to create a cost savings, the opportunity to cross-train personnel and a revenue stream that has already proven successful at the ENMAX Centre. Thus, it will be important to stress to renters the value of utilizing the City's Ticketing Centre, including enhanced online marketing and the development of customer databases that remain the property of the user, not the facility.

Food and Beverage Service**:** To the extent that space allows, the Centre should include food service capabilities, including concessions in conjunction with performances in both venues, catering for special events in the Centre and backstage catering for artists and others working in the building. Specific policy recommendations are as follows:

- The Centre should establish relationships with local caterers, which would guarantee a consistent level of customer service and the ability for the to collect a commission on catering sales.
- As mentioned previously, the foundation should hold the liquor permit for the Centre.

Volunteer Opportunities: Though the Centre must have a professional staff, we would encourage the development of a volunteer labor force. Local volunteers often play an important role in supporting the operation of arts and entertainment facilities. Additional human resources are helpful to the organization, but volunteers can play an even more important role as ambassadors, guerilla marketers, and even financial supporters for the organization. Staff should identify opportunities for volunteers in such areas as ushers for performances, tour guides for the facility and roving helpers. This particular task should be closely coordinated and perhaps integrated with volunteer operations of key user groups.

We would also take the position that volunteers should be treated like employees in terms of how they are trained, monitored, and evaluated.

Marketing Strategy

Here are some preliminary recommendations as to how marketing should be approached:

- Marketing and programming functions must work closely together at the Centre to identify the message and the media most likely to work for each presentation and artist.
- It will be critically important to build an online community of customers and supporters through email lists and other "push" technologies.
- Young people, particularly those of college-age, must be partners and advocates for various types of viral marketing.
- The branding and positioning of the facility and its programs should stress the following attributes:
    - That this is one of the best performing arts venues in the region and Province in terms of the quality, intimacy, and character of its multiple performance spaces.
    - That it supports a wide variety of programs that serve a larger mission for the community.

- o That it is easy to find, easy to park, and professionally staffed.

Green Operating Practices

Though performing arts and entertainment facilities have traditionally been slow to embrace energy efficiency and sustainability, changes are occurring in the field and there is an opportunity to use the Centre as a test facility for green operating practices. Here are some ideas coming from other performing arts venues:

- **Energy Efficiency:** Facilities should use renewable energy, such as green electricity, and minimize the amount of energy being used. Using energy-efficient light bulbs in the office and on stage, reducing the hours of use and purchasing energy-efficient equipment can achieve this. Organizations also need to consider the life-cycle cost impact of the materials that are used during a performance.
- **Consumables:** Facilities can make a big impact by consuming less and using recycled, Earth-friendly goods, such as paper and cleaning products. Some other ideas to reduce the use of consumable goods include the creation of a recycling program for the facility, sending correspondence electronically and encouraging staff, users and performers to use mugs and bottles instead of plastic glasses for beverages, including water (which should be provided via a cooler rather than individual bottles.)
- **Community Awareness and Participation:** A facility should not only implement “green” policies for itself, but also should also make the community aware of its efforts and encourage them to participate by using similar methods. Facilities can post information about its green initiative and guidelines on the website, include green slogans wherever possible (playbills, ads and posters) and organize forums on green practices, possibly combined with artist talkbacks.

6. pro-forma operating budget

The key element of the business plan is a pro-forma operating budget for recommended performing arts facilities in Lethbridge. Following is a description of the format and structure of the pro-forma, and then a detailed review of assumptions and results. The key step in developing the pro-forma has been estimating activity for all of the proposed components of new facilities. While the resulting program of events is not an exact forecast of activity, it does provide a basis for projecting earned revenues, expenses and attendance.

The pro-forma should be considered a “live” model, one that can be adjusted based on changing circumstances and assumptions. It is fundamentally a tool to help prepare for the operation of new facilities. Our assumptions and predictions on activity and financial performance in new facilities are based on a combination of measured demand for facilities, our sense of capacity to pay (on the part of audiences and users), and the performance of comparable facilities.

Operating projections for proposed facilities are presented on five spreadsheets. The first details our assumptions about the size, purpose and rent for each programmable space, and how it is brought to life by rental activity. The second spreadsheet projects earned income, contributed income, operating expenses and results, as well as all of the ratios and formulas used to make these projections. The third page adds information from regional and comparable facilities that inform our projections. The fourth page is a sensitivity analysis, considering the implications of a drop in activity on the budget. And the final page shows a summary of year one results brought back to 2010 dollars, as we are assuming that new facilities open a minimum of three years hence.

Let’s begin with the Multi-year Activity Estimates spreadsheet. We start off by identifying all of the spaces we’ve proposed for the Centre along with their area (expressed as usable square feet) and capacities for the most likely set-up. For purposes of this exercise, we are assuming that the larger 1,250-seat hall, the rehearsal/recital room and the lobby are the three programmable spaces in the building.

For all of these spaces we then identify rental rates for resident organizations, other non-profits, private and corporate rentals and commercial arts renters for a specified time period. For example, a non-profit group could rent the lobby for a day for $1,200 in the opening year, whereas a commercial renter would pay $1,600. These rates could likely be split further to reflect time of the day, time of the week, or perhaps time of the year. In fact, some users may negotiate a flat fee or a percentage of gross revenues in lieu of rent. But for the purposes of this exercise, and in order not to over-complicate the issue, we use rates that reflect the type of user that are set in reference to other Lethbridge facilities. Rental rates (like many other items in the pro-forma) increase each year using a conservative escalation rate. Our overall approach is to make these spaces affordable as possible while also recognizing the quality offered to renters.

For each programmable space, activity starts with the presentation of live events and film, then rentals from resident users, other non-profits, private and corporate rentals and commercial arts event rentals. The most important step in the process has been estimating activity in all of these spaces, which makes up the balance of the worksheet. We have set these activity levels based on the work we've done with local arts groups, using calendars and surveys to predict utilization. To those levels of use we have added some additional activity and then suggested moderate growth in activity over time. We would view our activity assumptions as being fundamentally conservative. We have reduced some of the use estimates offered by local arts groups, not because we doubt their predictions but in order to present a more prudent estimate of total facility utilization.

For presenting activity (when the building buys a touring program and directly collects box office proceeds from the event), we have referred to presenting levels and ticket prices in comparable markets, as well as what has occurred recently in Lethbridge.

The other key variable on this spreadsheet is the capacity sold for each event. For live presented events, we assume a high 70% in the opening year, then a drop to 65% in year two (the honeymoon/hangover effect) and then gradual increases in subsequent years. We also suggest a similar pattern with film presentations and rentals, with slightly lower year one sales.

The second spreadsheet shows earned income, contributed income and operating expenses for the Centre. Additionally, detailed assumptions on margins, ratios and formulas used in the budget are provided at the bottom of the spreadsheet.

The first section shows earned income from facility presented performances and rentals, which comes directly from the activity spreadsheet. Additional earned income comes from user fees, such as charges for use of the box office, technical labor, security, cleaning and so on. For the time being, we are projecting these charges as a percentage of the base rental income.

Food service income is an important part of the budget. Concessions income is based on a net income per capita, meaning that there is net revenue (gross revenues minus direct costs) of $2.50 per paid attender in the first year of operations. The pro-forma also assumes income from fees collected for catered events in the lobby and recital/rehearsal hall.

Finally, other income includes ticket handling and facility maintenance fees. Ticket handling fees are intended to offset costs of ticket office operations, including postage, ticketing printing and network expenses, and are charged to patrons that purchase tickets online or over the phone. The pro-forma makes assumptions about how tickets are purchased (online, over the phone and in person) and sets fees based on those choices. There is an additional facility maintenance fee starting at $1.75 charged to ticket buyers. Ticketing fees are consistent with those at the ENMAX Centre.

We are not professional fundraisers, and it is far too early to know with any certainty where the funds will come from to sustain operations of new facilities. Nevertheless, we are confident of our ability to develop some starting assumptions about the sources; levels and growth of contributed income through these early years, summarized in the following chart:

Contributed Income Summary	Pre-opening Year	Year One	Year Two	Year Three	Year Four	Year Five	Year Six	Year Seven
Local Government	$900,000	$927,000	$954,810	$954,810	$926,166	$898,381	$871,429	$845,286
Other Government	$0	$25,000	$25,750	$26,523	$27,318	$28,138	$28,982	$29,851
Individual Donations/Membership	$0	$50,000	$100,000	$103,000	$106,090	$109,273	$112,551	$115,927
Building Sponsorships	$0	$150,000	$154,500	$159,135	$163,909	$168,826	$173,891	$179,108
Corporate Donations	$0	$50,000	$100,000	$103,000	$106,090	$109,273	$112,551	$115,927
Corporate Event Sponsorships	$0	$100,000	$110,000	$113,300	$116,699	$120,200	$123,806	$127,520
Foundation	$0	$0	$100,000	$103,000	$106,090	$109,273	$112,551	$115,927
Capital Budget Allocation	$250,000	$150,000	$0	$0	$0	$0	$0	$0
Endowment Income	$0	$0	$25,000	$50,000	$100,000	$150,000	$200,000	$200,000
Total Contributed Income	**$1,150,000**	**$1,452,000**	**$1,570,060**	**$1,612,768**	**$1,652,362**	**$1,693,363**	**$1,735,761**	**$1,729,548**

First of all, we assume that the City of Lethbridge is the single largest supporter of the facility, with their contribution starting the year before facilities open and adjusted for inflation in year one and year two. In subsequent years, the pro-forma anticipates a steady 3% decrease annually. Then we add other sources of public and private sector funding over time, recognizing the challenge of building those funding streams. Finally, we suggest the importance of an endowment as a significant element of annual funding, here beginning in the first year of operations. Note that there are several key elements of private support:

- There is a small line item for individual donations, which may come as a part of a membership program.
- There is income from naming gifts (i.e. building sponsorships).
- There are corporate and foundation donations to the operation of the building.
- There is corporate sponsorship of presented events in the building.

The operating expense portion of the budget starts with personnel costs, suggesting annual salaries for full-time and part-time personnel. Salaries have been set based on comparable facilities and our knowledge as consultants. Benefits have been estimated at 21% for full-time and part-time staff. There is also event-based staff for security, house, cleaning, projection and technical support.

Direct presenting costs are attributed to live and film presenting in the two performance spaces. These expenses are calculated on a per event basis, and include the costs of paying the artists, marketing costs, and other expenses. Film presenting expenses are calculated using a percentage of gross receipts (as a distribution expenses) and also include marketing costs and other costs. Our general approach is that there should be a small but positive margin on presenting.

The pro-forma also projects expenses associated with the operation of a ticket office, including network maintenance, postage, ticket printing, supplies, credit card fees and ticket service.

Building costs for new facilities are projected using the baseline per-square foot costs. Administrative overheads, including printing, office equipment, supplies, volunteer management, professional development, travel, entertainment, telephone and miscellaneous expenses increase annually with inflation.

The following chart summarizes activity and financial performance over time:

Operating Budget Summary	Pre-opening Year	Year One	Year Two	Year Three	Year Four	Year Five	Year Six	Year Seven
Total Paid Attendance		140,900	127,588	135,400	140,750	148,905	154,503	160,750
Earned Income	$0	$2,555,512	$2,269,667	$2,477,114	$2,674,054	$2,904,388	$3,116,785	$3,349,412
Contributed Income	$1,150,000	$1,452,000	$1,570,060	$1,612,768	$1,652,362	$1,693,363	$1,735,761	$1,729,548
Total Income	$1,150,000	$4,007,512	$3,839,727	$4,089,881	$4,326,416	$4,597,751	$4,852,546	$5,078,960
Operating Expenses	$1,101,950	$3,956,273	$3,849,594	$4,075,012	$4,303,338	$4,551,248	$4,800,216	$5,062,230
Surplus/(Deficit)	$48,050	$51,239	-$9,867	$14,869	$23,078	$46,503	$52,330	$16,729
Earned. Income as % of Op Exp	0%	65%	59%	61%	62%	64%	65%	66%

It is important to note the broader pattern of how the budget grows and changes. There are substantial operating expenses before any income is earned, and significant increases associated with more activity. There is significant earned income in the first operating year and then a drop-off in both activity and income in the second year. Then, we would predict a pattern of slow and gradual growth in activity and income. Contributed income is significant from the outset, but becomes more diversified over time, with the City's contribution essentially fixed through the period.

There are significant risks inherent in the operation of performing arts facilities. The most difficult element to predict is how much activity the building will support. On that basis, we have run a sensitivity analysis that suggests the impact on the building if there is 25% less activity and then 50% less activity that we have predicted for the baseline budget. This spreadsheet then projects changes in earned income and operating expenses with that drop in both rental and presenting activity – noting where expenses are fully variable and decline the same amount, somewhat variable and thus decreasing less than 25% and 50%, and then fixed, and thus not changing. Here is a summary table:

Sensivity to Activity Decine	Year One Base		25% Drop		50% Drop
Attendance	140,900	-25%	105,675	-50%	70,450
Earned Income	2,555,512	-25%	1,916,634	-50%	1,277,756
Operating Expenses	3,956,273	-14%	3,412,350	-27%	2,868,428
Annual Funding Requirement	1,400,761	7%	1,495,716	14%	1,590,672
Earned Income as % of Op Exp	65%		56%		45%

With the declines in activity there is a 7% increase and then a 14% increase in the annual funding requirement, meaning that the portion of the budget covered by earned income decreases from 65% to 56% and then to 45%.

Present Value of Year One Results	
Operating Budget Summary	**Present Value**
Earned Income	$2,270,539
Contributed Income	$1,290,083
Total Income	$3,560,622
Operating Expenses	$3,515,097
Surplus/(Deficit)	$45,525
Contributed Income Summary	**Present Value**
Local Government	$823,627
Other Government	$22,212
Individual Donations/Membership	$44,424
Building Sponsorships	$133,273
Corporate Donations	$44,424
Corporate Event Sponsorships	$88,849
Foundation	$0
Capital Budget Allocation	$133,273
Endowment Income	$0
Total Contributed Income	$1,290,083

The final exercise has been to bring future results back to a present value. If we assume that the building could open no sooner than three years from now, our base year operating results are four years hence. The chart to the left then translates those results back to 2010 dollars, reducing that base year contributed income requirement from $1.45 million to $1.29 million.

Overall, we see new facilities as having a reasonable ability to generate earned income, with an annual funding requirement rationalized in terms of the benefits and impacts of these new facilities on

Lethbridge and the region. That overall budget size and performance is also in line with comparable facilities in Canada, as shown below.

Facility	Location	Owner	Operator	Annual Budget	% Earned Income
The River Run Centre	Guelph, ON	City of Guelph	City of Guelph	$2.3 million	74%
Rotary Center for the Arts	Kelowna, BC	City of Kelowna	Kelowna Visual and Performing Arts Centre Society	$1.9 million	59%
Winspear Centre	Edmonton, AB	Edmonton Symphony	Edmonton Symphony	$4.5 million	56%
The Sage Brush Theatre	Kamloops, BC	City of Kamloops and Thompson SD	Western Canada Theatre	$1.2 million	55%
Festival Place	Sherwood Park, AB	Strathcona County	Strathcona County	$2.6 million	43%
Empress Theatre	Fort Macleod, AB	Empress Theatre Society	Empress Theatre Society	$0.6 million	41%
The Port Theatre	Nanaimo, BC	City of Nanaimo	The Port Theatre Society	$1.8 million	25%

Also key to this pro-forma is reasonable audience estimates, which are used to develop earned income projections. To test activity assumptions, we compared population estimates and audience attendance rates with audience attendance levels at the Centre. The following chart estimates performing arts attendance in the Chinook Regional Health Authority and at the Centre.

Chinook Regional Health Authority Performing Arts Attendance	
Total Population, 2015 Estimate	175,000
Percentage of Canadians Attending a concert or performance*	41%
Total Attendance in the Chinook Regional Health Authority	71,750
Average Number of Attendances per Attender**	2.0
Total Attendances, Chinook Health Region	143,500
Lethbridge Performance Facilities Share of Market	60%
Estimated Attendance for Lethbridge Performance Facilities	86,100
*2005 General Social Survey, Statistics Canada	
**Canada Heritage, 2002, The Arts in Canada: Access and Availibility	

We started with population estimates for the Chinook Regional Health Authority for the year 2015 and then used data sourced from the 2005 General Social Survey (Statistics Canada), which states that 41% of Canadians attend professional concerts and performances. Based on this data, 71,750 people in the Health Authority attend professional concerts and performances annually. We also used data from a 2002 Canada Heritage Study (The Arts in Canada: Access and Availability) that suggested residents attend an average two performances per year. This brings us to a total number of attendances, 143,500 for the year 2015. Finally, we anticipated that the building has a 60% market share of total attendances or 86,100 attendances.

This chart shows pro-forma audience estimates, anticipating the level of resident and non-resident attendance. If we estimate that 65% of attendances come from outside the province, 15% come from within the province, but outside the Health Region, 5% travel from outside of Alberta, and 15% would have traveled outside of the health region (i.e. to Calgary), then that means 82,932 originate from within the Health Region. This number is relatively close to the 86,100 projected attendances for the market.

Chinook Regional Health Authority Attendance Estimates	
Attendance Estimate, Year 2 of Pro-forma	127,588
less 5% attenders from outisde of Alberta	-6,379
less 15% Alberta attenders from outside of the Chinooke Health Region	-19,138
less 15% Alberta attenders recaptured from the Chinook Health Region	-19,138
Total Attenders Required from the Chinook Health Region	82,932

7. critical path plan

We have suggested how the facility should operate when complete, but there is a great deal to do in order to become fully operational. This chapter outlines the tasks that are most critical to preparing for the facility's doors to open and suggests a timeline for implementation. A summary is included as Appendix D.

Human Resources Development

First and foremost, human resources must be developed to begin to establish and prepare for the facility to become operational. Clearly, hiring an Executive Director is of utmost importance as that person will be responsible for developing the structure, policy and procedure necessary for the building to successfully open. The timing of new staff hires is based on the staffing detail in the pro-forma.

Programming

This function begins with extensive thinking and policy-writing around booking, rentals and presenting. Programming plans should be developed for each area. Seasons are generally booked a year (or more) in advance.

Marketing, Ticketing & Front of House Operations

The establishment of the Centre's marketing function should first focus on broader branding strategy. After branding is addressed, a season marketing plan and budget should be established. Then, efforts for each individual show should be planned and scheduled.

A certain amount of policy creation will be also be involved here. For example, design and printing vendors will need to be established. In addition, the Centre box office will need to be integrated into the City's Ticketing Centre, which may include the purchase any additional equipment and supplies before staff is hired and trained. Similarly, front of house policies should be developed before staff is hired and trained.

Fundraising

The organization will need to quickly develop fundraising capacity in order to support ongoing operations. The foundation should play a central role in that effort, but day-to-day fundraising activities should be planned and managed by the Development Director. Specific plans for membership; corporate partnerships, sponsorship and naming rights should be developed.

Facility Operations

Significant effort must be invested in preparing for the opening of the Centre, including:

- Booking policy and procedures as well as a rental agreement (and rates).
- Vendor contracts and permitting for various functions, including insurance, food service (for special events and any other needs) and facility maintenance.
- Proper protocols for equipment use, safety considerations and capital maintenance of the facility.
- Finally, as the opening approaches and the facility management team is put in place, rentals are booked, contractors are put in place and the various equipment systems are commissioned.

More than anything, the best predictor of success in new facilities is the level of preparation made before the doors open. That work has begun with the development of this plan.

8. economic impact analysis

Section One: Quantitative Economic Impacts

Economic impact means that something has happened to increase economic activity, which includes new sales, new earnings for workers and new jobs in the economy. In our world, these impacts are caused by several things: first there are the impacts of construction of new facilities (which are counted as one-time impacts); then there are the ongoing impacts of the new or expanded operating organization (the entity making expenditures in the local economy), and finally there are the impacts of new audiences, who spend money in association with their attendance at events. These audience expenditures are often referred to as induced impacts.

All economic impacts are also split between direct and indirect impacts. Direct impacts (which also include the induced impacts of audience) are the measure of the economic effect of the initial expenditure within a community. Then there are the indirect impacts, which occur as people and businesses receive and then re-spend those initial direct expenditures locally. The indirect impact is the effect of this re-spending on sales, jobs and household earnings. It is often referred to as secondary spending or the dollars “rippling” through a community. When funds are spent outside the market area, they are considered to have “leaked out” of the community and therefore cease to have a positive local economic impact. Indirect impact is then the sum of the rounds of local spending after the initial expenditures.

The shift from direct impacts to indirect impacts is measured by employing multipliers that come from an “Input-Output” model. Multipliers translate an input into an output: for example, a dollar spent on food (input) has an impact on the local economy by virtue of new sales in that industry and new jobs created in that industry (output). There are two multipliers for each industry. The output multiplier is the estimate of total new sales associated with the initial expenditure. And the employment estimate forecasts the jobs created in each industry as a result of new expenditures.

For our analysis, we have received provincial multipliers from Alberta Finance and Enterprise, which is based on the 2005 input-output tables produced by Statistics Canada. Notably, there is a distinct difference between the Statistics Canada model and the Alberta model, in that the Alberta model also provides estimates of induced economic impacts when the model is closed to households and the Statistic Canada model provides inter-provincial impact (the Alberta model is the Province only). The most common use of Alberta economic multipliers is to estimate the economic impact associated with the establishment or expansion of a new business, organization or firm. It should also be noted that there are some limitations to these multipliers, primarily if there has been a shift in the market share for Alberta industries, changes in technology that may affect certain industries, and an increase or decrease in average costs depending on level of capacity utilization.

It is unfortunate that there are no multipliers for Lethbridge or even the region around it, but the provincial multipliers are still helpful in estimating the overall impacts of the project on the provincial economy.

Construction Impacts: The following chart shows the sum of construction expenditures and resulting impacts.

One-time Impacts of Construction on Alberta		
	Construction Budget	$ 60,000,000
Industry: Construction (230)	Direct and Indirect Impacts	Project Outputs
Gross Production	2.206	$132,360,000
Employment (jobs creted)	0.097	582

If $60 million dollars is spent on construction, there is gross production in the Province of $132 million and 582 person-years of new employment created over the course of the construction project.

Operations: The following chart shows how we calculate operating outputs based on a series of new estimated expenditures by the organization running new facilities. Wages are subtracted from the total operating budget and the balance is allocated among the various categories for which multipliers exist. Note that this is all new activity, as opposed to activity transferred from existing facilities.

Impacts of the New Organization on Alberta Economy					
Closed Model (Base Year Budget)	Inputs	Multipliers		Outputs	
Category	Pro-forma Purchases	Gross Production	Empl't (jobs)	New Sales ($000's)	New Empl't (jobs)
Electrical power generation and supply	$ 200,000	1.543	0.031	$ 308,600	0.6
Natural gas distribution, water, sewage, etc.	$ 50,000	1.933	0.059	$ 96,650	0.3
Printing and R\related support activities	$ 50,000	1.837	0.096	$ 91,850	0.5
Retail Trade	$ 75,000	2.185	0.127	$ 163,875	1.0
Transit and ground passenger transporation	$ 10,000	2.393	0.195	$ 23,930	0.2
Postal service, couriers and messengers	$ 30,000	2.235	0.193	$ 67,050	0.6
Motion picture and sound recording	$ 50,000	1.782	0.082	$ 89,100	0.4
Broadcasting and telecommunications	$ 75,000	1.603	0.065	$ 120,225	0.5
Publishing, info services and data processing	$ 150,000	1.833	0.103	$ 274,950	1.5
Finance, insurance, real estate, rental and leasing	$ 100,000	1.910	0.076	$ 191,000	0.8
Adminstrative support services	$ 200,000	2.116	0.187	$ 423,200	3.7
Waste management	$ 25,000	1.570	0.065	$ 39,250	0.2
Arts, entertainment and recreation	$ 600,000	2.303	0.252	$ 1,381,800	15.1
Accommodation and food services	$ 75,000	2.027	0.184	$ 152,025	1.4
Repair and maintenance	$ 150,000	2.053	0.183	$ 307,950	2.7
Nonprofit educational services	$ 50,000	2.073	0.191	$ 103,650	1.0
Municipal government services	$ 150,000	1.980	0.117	$ 297,000	1.8
Averages and Totals	$ 2,040,000	1.96	0.13	$ 4,132,105	32.2

Using the Provincial multipliers, we can project the impacts of those expenditures on the Province, allowing us to suggest that in the base year of operations, non-personnel expenditures of $2 million lead to new sales of $4.1 million and 32 new jobs in the region beyond those directly employed in the building.

Ancillary Spending: Finally, we project the impacts of new audiences on the regional economy. Our first step is to estimate incremental audiences and audiences coming from outside the Province.

Estimated Attendance		
Total Projected Attendance (Year Two)		127,588
Less Relocated Attendance		63,794
Projected Incremental Attendance		63,794
1. Alberta (Chinook Health Region) Attendance	65%	41,466
2. Alberta (non-Chinook Health Region) Attendance	15%	9,569
3. Recaptured Attendance	15%	9,569
4. Regional (non-Alberta) Attendance	5%	3,190

The total projected attendance in the facility in year two, taken from our pro-forma operating budget, is estimated at 127,588. Then, we estimate that one-half of those attenders are relocated from other facilities in the region. The balance, which is new audience, is then split between the Province's Chinook Health Region (65%), Province audiences traveling from out-side the Chinook Health Region (15%), and the area outside the Province (5%). The analysis also anticipates that 15% of attendance is recaptured – meaning audiences who would have otherwise traveled outside of the Chinook Health Region to attend arts events. It is important that we do NOT include existing or Provincial audiences in the calculation of spending, as these are expenditures that are simply moving around the defined economic region, as opposed to new economic activity in the region.

Now, we input those estimates into per capita spending estimates, useful statistics taken from the new Arts and Economic Prosperity Report published by Americans for the Arts that suggest how much audiences generally spend on eating, drinking, shopping, traveling and so on in conjunction with going to a performance (there is no Canadian version of these statistics). Then we apply our Provincial multipliers to these direct impacts and add the totals for each industry to arrive at total impacts associated with the expenditures of audiences.

Ancillary Spending Impacts	Per Capita Expenditure Estimate	Total Direct (Induced) Expenditures	Gross Production Multiplier	Gross Production	Empl't (jobs) Multiplier	Total New Jobs
Resident Attendance (1+3)						
Accommodation and food services	$8.15	$415,937	2.0270	$843,104	0.1840	7.65
Retail Trade	$2.80	$142,899	2.1850	$312,233	0.1270	1.81
Transit and ground passenger transporation	$4.27	$217,920	2.3930	$521,483	0.1950	4.25
Sub-total		**$776,756**		**$1,676,821**		**13.72**
Non-resident (Stay-over) Attendance (2+4)						
Food services and drinking places	$15.28	$194,954	2.0270	$395,173	0.1840	3.59
Retail Trade	$8.70	$111,002	2.1850	$242,538	0.1270	1.41
Transit & passenger transportation	$5.82	$74,256	2.3930	$177,695	0.1950	1.45
Sub-total		**$380,212**		**$815,406**		**6.44**
Total Impact of Ancillary Spending	**Total**	**$1,156,968**		**$2,492,227**		**20.16**
	Excluding Provincial Attendance	**$380,212**		**$815,406**		**6.44**

At the bottom of the chart, we show these total impacts. We then highlight just those associated with audiences coming from outside the region. For that non-regional group, new expenditures of $380,212 in the opening year lead to new annual outputs of $815,406 and 6 jobs created on an ongoing basis.

Section Two: Qualitative Economic Impact Analysis

In this section, we look at the broader roles and impacts of new arts and entertainment facilities on Lethbridge and the surrounding region. It is only qualitative in that we do not have the formulas to project these impacts in a numerical sense. Nevertheless, the experiences of other communities give us the confidence to predict certain impacts over the life of new facilities. We will start with the more specific and tangible impacts and then look at the broader possibilities.

Downtown Economic Development: Thinking from the perspective of a downtown developer, we might imagine what 125,000 attenders and almost $1 million a year spent principally in the downtown might mean to the community. Clearly, new facilities can and will have a positive impact on the downtown. Changes that can be anticipated include:

- More restaurants will start, expand, and prosper by servicing audiences before and after performances.
- Additional retail businesses will open in response to the street and pedestrian activity around new facilities.
- Having the lights on in new facilities will affirm the perception (and reality) of downtown safety, which will encourage more commercial and potentially residential development.
- Of particular importance will be the presence of young people around the facility, perhaps associated with Lethbridge College or the University. Their presence will likely motivate the development of new urban amenities (bars, clubs, coffee shops, bookstores) that fit in a downtown core.

Having said all of this, it is important that the facility is sited so as to fit into the overall Heart of Our City Master Plan along with other social infrastructure plans in such areas as pedestrian-friendliness, smart growth on the ground, access and transportation networks, connectivity grids and more.

Corporate Recruitment: Performing arts facilities are important amenities to offer to corporations considering where to locate their business. The presence of these facilities is often seen as an indicator on a community that has an educated workforce and offers a high quality of life.

Richard Florida and The Creative Class: Economist and author Richard Florida, now associated with the Rotman School of Management at the University of Toronto, has turned a simple idea into an empire. The simple idea is that people (particularly people with interesting jobs and skills) like to live and work in creative places, and that cities ought to promote culture and creativity as a means to recruit these desirable people and thus drive economic development. Cities all over North America (and not just big ones) are now pursuing economic development goals by promoting the presence of arts and culture and the people who enjoy them. Of course, it is all easier said than done. The trick is to help artists in ways that do not stifle creativity, and then surround that creative core with a concentration of more commercially-oriented industries (advertising, design and media) that benefits from and feeds off of that creativity.

Cultural Tourism: Tourists and tourism are potentially an important element of the regional economic development strategy. It turns out that cultural tourists (those interested in attending and participating in cultural programs) are very attractive in that they tend to spend more and stay longer in a given community than other types of tourists. Thus, the presence of new arts facilities can play a significant role in developing and promoting Lethbridge as a destination for cultural tourists.

Lethbridge as a Regional Service Centre: The presence of the University of Lethbridge, Lethbridge College, and steady population growth has positioned the City as the regional service centre in Southern Alberta. It is therefore logical to consider Lethbridge as the regional centre for the arts, as it is home to a number of established arts organizations, larger facilities and access to larger audiences that attract shows to the region and thus drive new residential and commercial development.

Teaching Innovation and Creativity: Finally, we would raise one last economic development benefit. It is now being recognized that the teaching of the arts is a fundamental need for the North American economy and its workforce, given the automation of many jobs and growing competition from lesser-developed economies. Or, as some commentators are now suggesting: “The MFA is the new MBA.” Daniel Pink, in his March 2008 Nancy Hanks Lecture on Arts and Public Policy, said the following:

> “The argument for the arts is that the fundamental cognitive abilities, the fundamental abilities, of the workforce today and into the future, the fundamental abilities that our kids are going to be deploying at work are at their core artistic abilities, that arts are neither an avenue to something else, nor are they a nicety, but they are fundamental to how the economy functions. And unless our kids have this broad, robust suite of artistic capabilities, they are going to be in a world of hurt, yes, as human beings, but also as productive members of the economy.”

Section Three: The Role and Impacts of Culture in Smaller Communities

Before leaving this set of arguments, let’s be clear that the arts and culture can have significant impacts in smaller communities, not just in larger cities. According to a recent study for the Ontario Ministry of Research and Innovation[1]:

> Recent research suggests that while creative and cultural activities are very prominent in large urban centres, it is not to the exclusion of smaller urban centres (Scott 2004). For example, Norcliffe and Rendace (2003) use the case of comic book artists to demonstrate that, due to changes in the organization of production, it is possible for creative workers to locate outside of major metropolitan centres and continue to work in creative fields. Gibson (2003) also points to the emergence of communities of musicians and other artists in rural and small towns in Australia. Markusen and King’s (2004) work on the role of artists in the regional economy demonstrates this point quite succinctly. Their study clearly shows that geographical distribution of artistic activity within the US economy is decentralizing towards second-tier cities. Specifically, the traditional dominance of artistic and creative centres such as New York and Los Angeles is declining, as artists appear to be spreading out towards cities such as Minneapolis-St. Paul, San Francisco, Albuquerque and Seattle.
>
> If such a trend continues this may bode well for mid-sized cities, as well as smaller centres within proximity to large urban regions. Many such places pride themselves on their ‘good quality of life at affordable prices’, while also supporting a vibrant cultural scene. Such characteristics may provide a solid foundation on which to build and maintain successful urban economies.
>
> In the Canadian case, Gertler and Vinodrai (2004) find that designers are highly concentrated in Canada’s urban centres, with Toronto being the largest centre in both absolute and relative terms. However, when they examine the distribution of designers working in specific fields they show that smaller centres are also home to a significant amount of design activity. For example,

[1]Vinodrai, Tara and Gertler, Meric: Creativity, Culture and Innovation in the Knowledge-based Economy, Program Globalization and Regional Innovation Systeme, University of Toronto (2006)

Windsor and Kitchener – both centres of traditional manufacturing activity – also have high concentrations of industrial designers working with local manufacturers to enhance the creative content (and economic value) of their products.

appendix a:
comparable projects

River Run Centre,
Guelph, ON

Year of Construction	1997
Cost	$15 million
Physical Components	785-seat Main Stage 225-seat multi-purpose room Lobby with capacity for 500 Small green room, six dressing rooms
Development Scenario	There had been attempts to get a theater built for 30 years. In 1991 a speed skating rink burned down. Through funding from the City of Guelph, the Government of Ontario, the Government of Canada, and more than 1,400 companies, foundations and individuals, the cost to build the centre was raised. Construction started in 1995 and was completed in 1997.
Programming and Utilization	In total, the facility houses approximately 500 events per year: • 45-50 are performances presented for schools at no charge to schools • 40-45 are professional touring artists • 400 per year are predominately community group rentals • Many corporate meetings take place in the facility, along with some limited banquet functions. • Annual professional entertainment season features more than 200 artists performing an array of music, theatre, dance, and comedy.
Governance and Ownership	The Centre is owned and operated by the City and managed under the auspices of the RRC Board of Directors.
Staffing	The Centre has a full-time staff of 12, including: • General Manager • Assistant to the General Manager • Supervisor of Development and Communications • Supervisor of Ticketing and Event Services • Box office Coordinator, • Supervisor of Front of House Services, • Operations Coordinator, Cleaner • Supervisor of Technical Services • Lead Technician/ Head of Lighting, Additionally, their part-time staff includes: • Volunteer Coordinator • Marketing Coordinator • Front of House Staff • Box Office Staff • Ticketing Staff • Event Services Assistant Additional cleaners, and house technicians as needed. The Centre has an 18-member board of directors.
Operating Budget	$2.3 million total revenue. 74% earned revenue. The balance of the budget (funding requirement) is a line item within the City's operating budget.

Winspear Centre,
Edmonton Alberta

Year of Construction: 1997

Cost: $45 million

Physical Components:
1,932 seat Enmax Hall
Green Room/Staff Lounge
350 Sq. m. Studio
191.5 Sq. m. lounge w/ bar, coat check, fireplace and washrooms.
860 Sq. m. Main Lobby
520 Sq. m. 2nd floor lobby
665 Sq. m. Upper Lobby
All lobbies have bars and restroom access.

Development Scenario: Since the early 80s there had been two groups looking into the feasibility of a concert hall in Edmonton. In 1983, these groups joined forces as the Edmonton Concert Hall Foundation under the efforts of then senator Tommy Banks. Dr. Francis G. Winspear made a $6 mil. Donation, which helped secure $15 mil from the federal government and matching funds from Alberta. A number of fund raising initiatives were undertaken to bring in the remaining funds from the community.

Programming and Utilization: The Centre is the home to the Edmonton Symphony Orchestra. It is available for rent to all types of organizations, though due to the design the events are mostly music oriented, however there are some dance performances, and youth oriented events scheduled. Additionally all rooms are made available for weddings and other private events.

Governance and Ownership: The Centre is owned and operated by the Edmonton Symphony Society. Originally, the Edmonton Concert Hall Foundation held a 90-year lease agreement with the City for $1/year. Edmonton Concert Hall Foundation, the initial operator of the Centre, recently relinquished control of the building to the Symphony in a restructuring.

Staffing: Approximately 24 FTEs

- Managing Director
- Director of Finance & Admin
- Staff of 10 in Operations Department
- Staff of 6 in Administration & Finance
- Staff of 2 in Marketing & Communications
- Staff of 4 in Box Office

The Board of Directors is composed of 18 individuals.

Operating Budget:
$4.5 million (2009)
$44k from federal government
$325k from provincial government
$7.5k from regional
$2.5 mil earned
56% earned income

These income and expenses shown here are specifically for the operating of the Centre and do not include the budget for the Edmonton Symphony Orchestra, which is approximately an additional $4 million.

Esplanade Arts & Heritage Centre
Medicine Hat, Alberta

Year of Construction	2005
Cost	$42.1 million
Physical Components	2,300 sf art gallery Museum, archive facilities, Gift Shop, and Cafe 710-seat theatre Multi-level Lobby, with capacities of 464 on the first level and 263 on the second level. 140-capacity studio theatre. Discovery Centre
Development Scenario	The Medicine Hat Museum, Art Gallery, and Archives had outgrown it's facility, so the City began discussing a new location. A feasibility study was undertaken, and the cultural community was given a cultural planning workshop. It was found that there was as much a need for a new theatre as a museum and art gallery. Of the $42.1 million capital cost, $9.5 million was raised from government sources and the community contributed $2 million.
Programming and Utilization	The Centre aims its programs at various age groups. They have an extensive education program aimed primarily at young students. They present ten to twelve exhibitions in the art gallery per year, highlighting artists ranging from local to international prominence. There are 140 – 150 shows per year in the theater. There is a mix of presented work and rentals to local organizations and promoters. Additionally they have a summer season of presented musical acts. This year, the Centre has been chosen as a flagship venue for Alberta Arts Days.
Governance and Ownership	The Esplanade Arts & Heritage Centre is owned and operated by the City of Medicine Hat. The Arts & Heritage Advisory Board is not a controlling board, but does serve as ambassadors of the building to the community. The Centre has a membership program, and is currently pursuing an endowment program with a focus on planned giving. This fundraising effort is in partnership with the local community foundation.
Staffing	There are 21 full-time staff (30.5 FTEs) The Manager of Cultural Development for the City of Medicine Hat oversees the Centre. Key staff positions include: • Curator of Arts • Curator of Cultural History • Director of Theatre Operations • Senior Administrator • Education Coordinator • Volunteer Coordinator • Marketing & Promotions Coordinator
Operating Budget	<u>2009 Budget:</u> Theater expenses: $2.2 million City Subsidy $388,000 Gift Shop $38,009 Cafe $1534 Theatre $1,457,000 Other Rentals $24,600 Memberships $9150 Total Revenue: $1,530,293

The Port Theatre,
Nanaimo, BC

Year of Construction	1998
Cost	$13.1 million
Physical Components	804 seat theater On waterfront. Lobby with capacity for 700. Additional reception room, capacity of 75. Backstage dressing rooms, greenroom, artist lounge
Development Scenario	After nearly 40 years of separate citizen's initiatives, the Port Theatre society formed in 1989 aimed at building an 800-seat theatre on the waterfront under the leadership of Sandra Thomson. $8.6 million given from the Infrastructure Works program, remaining $4.5 million brought in from city, regional district, individual service clubs, and corporate donors.
Programming and Utilization	The facility functions primarily as a rental space for local organizations and outside promoters. The Society presents a series of 20-25 performances per year focusing on Canadian artists. There are a total of approximately 250 events per year. Events of all kinds occur in the venue. Most are family friendly, but there is no emphasis on children's programming. This year they are starting a family series with three to four productions per year.
Governance and Ownership	The Theatre is owned by the City of Nanaimo. It is operated by the Port Theatre Society, a non profit corporation. The City is responsible for all structural upkeep of the facility; the Port Theatre Society takes care of all internal repairs.
Staffing	Full-time administrative staff of 13 to 16, including: • General Manager • House Managers • Programming and Development Manager • Accountant, Publicist, Executive Assistant • Box Office Staff, and Production Staff. The Board of Directors is composed of seven individuals including members of City Council. The Theatre also has a rotating part time staff of 25, and another 50 theatre technicians.
Operating Budget	$1.8 million annual budget. $84k in gifts $599k from municipal/regional government $640k revenue from sales $298k from fundraising Approximately $450K from earned income, or %25 of total income.

appendix c:
pro-forma operating budget

MULTI-YEAR ACTIVITY ESTIMATES

COMPONENTS	Capacity	Configuration
Performance Spaces		
Large Theatre	1,250	Theater-style
Rehearsal/Recital Hall	250	Theater-style
Lobby	800	Reception

				Year One OPENING YEAR	% Change	Year Two	% Change	Year Three	% Change	Year Four	% Change	Year Five	% Change	Year Six	% Change	Year Seven
RENTAL RATES	Large Theatre	Resident Groups	Event Day	$1,875	3%	$1,931	3%	$1,989	3%	$2,049	3%	$2,110	3%	$2,174	3%	$2,239
			Prep Day	$938		$966		$995		$1,024		$1,055		$1,087		$1,119
		Nonprofit	Event Day	$2,500	3%	$2,575	3%	$2,652	3%	$2,732	3%	$2,814	3%	$2,898	3%	$2,985
			Prep Day	$1,250		$1,288		$1,326		$1,366		$1,407		$1,449		$1,493
		Commercial	Event Day	$3,750	3%	$3,863	3%	$3,978	3%	$4,098	3%	$4,221	3%	$4,347	3%	$4,478
			Prep Day	$1,875		$1,931		$1,989		$2,049		$2,110		$2,174		$2,239
	Small Theatre	Resident Groups	Event Day	$375	3%	$386	3%	$398	3%	$410	3%	$422	3%	$435	3%	$448
			Prep Day	$188		$193		$199		$205		$211		$217		$224
		Nonprofit	Event Day	$500	3%	$515	3%	$530	3%	$546	3%	$563	3%	$580	3%	$597
			Prep Day	$250		$258		$265		$273		$281		$290		$299
		Commercial	Event Day	$750	3%	$773	3%	$796	3%	$820	3%	$844	3%	$869	3%	$896
			Prep Day	$375		$386		$398		$410		$422		$435		$448
	Lobby	Resident Groups	Event Day	$800	3%	$824	3%	$849	3%	$874	3%	$900	3%	$927	3%	$955
		Nonprofit	Event Day	$1,200	3%	$1,236	3%	$1,273	3%	$1,311	3%	$1,351	3%	$1,391	3%	$1,433
		Commercial	Event Day	$1,600	3%	$1,648	3%	$1,697	3%	$1,748	3%	$1,801	3%	$1,855	3%	$1,910
ATTENDANCE	Capacity Sold	Live Presenting		70%		65%		66%		67%		68%		69%		70%
		Film Presenting		50%		50%		50%		50%		50%		50%		50%
		Rentals		60%		55%		56%		57%		58%		59%		60%
ACTIVITY	PERFORMANCE SPACES															
	Large Theatre															
	Live Touring Events		Performances	20		15		16		17		18		19		20
			Event Days	18		13		14		15		16		17		18
			Prep Days	2		2		2		2		2		2		2
			Use Days	20		15		16		17		18		19		20
			Attendance	17,500		12,188		13,200		14,238		15,300		16,388		17,500
			Ave Ticket Price	$50	3%	$52	3%	$53	3%	$55	3%	$56	3%	$58	3%	$60
			Ticket Revenue	$875,000		$627,656		$700,194		$777,885		$861,014		$949,880		$1,044,796
			Rent Paid	0		0		0		0		0		0		0
	Facility-presented Film		Screenings	6		6		6		6		6		6		6
			Event Days	3		3		3		3		3		3		3
			Prep Days	0		0		0		0		0		0		0
			Use Days	3		3		3		3		3		3		3
			Attendance	3,750		3,750		3,750		3,750		3,750		3,750		3,750
			Ave Ticket Price	$10	3%	$10	3%	$11	3%	$11	3%	$11	3%	$12	3%	$12
			Ticket Revenue	$37,500		$38,625		$39,784		$40,977		$42,207		$43,473		$44,777
			Rent Paid	0		0		0		0		0		0		0
	Resident Rentals		Performances	90		94		96		98		100		102		104
			Event Days	86		89		91		93		95		97		99
			Prep Days	43		45		46		47		48		48		49
			Use Days	128		134		137		140		143		145		148
			Attendance	67,500		64,625		67,200		69,825		72,500		75,225		78,000
			Ave Ticket Price	$30	3%	$31	3%	$32	3%	$33	3%	$34	3%	$35	3%	$36
			Ticket Revenue	$2,025,000		$1,996,913		$2,138,774		$2,288,990		$2,447,982		$2,616,192		$2,794,082
			Rent Paid	$200,391		$215,576		$226,767		$238,436		$250,602		$263,282		$276,498
	Nonprofit Rentals		Performances	18		18		19		19		20		20		21
			Event Days	17		17		18		18		19		19		20
			Prep Days	9		9		9		9		10		10		10
			Use Days	26		26		27		27		29		29		30
			Attendance	13,500		12,375		13,300		13,538		14,500		14,750		15,750
			Ave Ticket Price	$30	3%	$31	3%	$32		$32		$32	3%	$33	3%	$34
			Ticket Revenue	$405,000		$382,388		$423,299		$430,858		$461,492		$483,532		$531,803
			Rent Paid	$53,438		$55,041		$59,841		$61,637		$66,827		$68,832		$74,442
	Private and Corporate Rentals		Performances	0		0		0		0		0		0		0
			Event Days	8		9		9		10		10		10		10
			Prep Days	0		0		0		0		0		0		0
			Use Days	8		9		9		10		10		10		10
			Attendance	0		0		0		0		0		0		0

		Year One	% Change	Year Two	% Change	Year Three	% Change	Year Four	% Change	Year Five	% Change	Year Six	% Change	Year Seven
		OPENING YEAR												
	Ave Ticket Price	$0		$0		$0		$0		$0		$0		$0
	Ticket Revenue	$0		$0		$0		$0		$0		$0		$0
	Rent Paid	$30,000		$34,763		$35,805		$40,977		$42,207		$43,473		$44,777
Commercial Arts Event Rentals	Performances	5		5		6		6		7		7		7
	Event Days	5		5		6		6		7		7		7
	Prep Days	0		0		0		0		0		0		0
	Use Days	5		5		6		6		7		7		7
	Attendance	3,750		3,438		4,200		4,275		5,075		5,163		5,250
	Ave Ticket Price	$40	3%	$41	3%	$42		$42		$42	3%	$44	3%	$45
	Ticket Revenue	$150,000		$141,625		$178,231		$181,414		$215,363		$225,648		$236,357
	Rent Paid	$18,750		$19,313		$23,870		$24,586		$29,545		$30,431		$31,344
Large Theater Summary	**Large Theater Summary**	**Year One**		**Year Two**		**Year Three**		**Year Four**		**Year Five**		**Year Six**		**Year Seven**
	Performances	139		138		143		146		151		154		158
	Event Days	137		136		141		145		150		153		157
	Prep Days	53		55		57		58		59		60		61
	Use Days	190		192		198		203		209		213		218
	Attendance	106,000		96,375		101,650		105,625		111,125		115,275		120,250
	Ticket Revenue	$3,492,500		$3,187,206		$3,480,282		$3,720,124		$4,028,057		$4,318,725		$4,651,815
	Rent Paid	$302,578		$324,691		$346,284		$365,637		$389,180		$406,018		$427,060
Rehearsal/Recital Hall														
Live Touring Events	Performances	20		15		16		17		18		19		20
	Event Days	18		13		14		15		16		17		18
	Prep Days	2		2		2		2		2		2		2
	Use Days	20		15		16		17		18		19		20
	Attendance	3,500		2,438		2,640		2,848		3,060		3,278		3,500
	Ave Ticket Price	$20	3%	$21	3%	$21	3%	$22	3%	$23	3%	$23	3%	$24
	Ticket Revenue	$70,000		$50,213		$56,016		$62,231		$68,881		$75,990		$83,584
	Rent Paid	0		0		0		0		0		0		0
Facility-presented Film	Screenings	20		18		18		20		20		22		22
	Event Days	10		9		9		10		10		11		11
	Prep Days	0		0		0		0		0		0		0
	Use Days	10		9		9		10		10		11		11
	Attendance	3,500		2,925		2,970		3,350		3,400		3,795		3,850
	Ave Ticket Price	$10	3%	$10	3%	$11	3%	$11	3%	$11	3%	$12	3%	$12
	Ticket Revenue	$35,000		$30,128		$31,509		$36,606		$38,267		$43,994		$45,971
	Rent Paid	0		0		0		0		0		0		0
Resident Rentals	Performances	80		82		84		86		88		90		92
	Event Days	76		78		80		82		84		86		87
	Prep Days	76		78		80		82		84		86		87
	Use Days	152		156		160		163		167		171		175
	Attendance	12,000		11,275		11,760		12,255		12,760		13,275		13,800
	Ave Ticket Price	$15	3%	$15	3%	$16	3%	$16		$16	3%	$17	3%	$17
	Ticket Revenue	$180,000		$174,199		$187,143		$200,871		$209,148		$224,117		$239,970
	Rent Paid	$42,750		$45,133		$47,621		$50,218		$52,927		$55,754		$58,703
Nonprofit Rentals	Performances	20		20		22		22		24		24		24
	Event Days	18		18		19		19		20		20		20
	Prep Days	18		18		19		19		20		20		20
	Use Days	36		36		38		38		40		40		40
	Attendance	15,000		13,750		15,400		15,675		17,400		17,700		18,000
	Ave Ticket Price	$10	3%	$10	3%	$11	3%	$11		$11	3%	$11	3%	$12
	Ticket Revenue	$150,000		$141,625		$163,379		$171,285		$190,134		$199,215		$208,669
	Rent Paid	$13,500		$13,905		$15,118		$15,571		$16,883		$17,389		$17,911
Private and Corporate Rentals	Performances	0		0		0		0		0		0		0
	Event Days	6		7		7		7		8		8		9
	Prep Days	0		0		0		0		0		0		0
	Use Days	6		7		7		7		8		8		9
	Attendance	0		0		0		0		0		0		0
	Ave Ticket Price	$0		$0		$0		$0		$0		$0		$0
	Ticket Revenue	$0		$0		$0		$0		$0		$0		$0
	Rent Paid	$4,500		$5,408		$5,570		$5,737		$6,753		$6,956		$8,060
Commercial Arts Event Rentals	Performances	6		6		7		7		8		8		9
	Event Days	6		6		7		7		8		8		9
	Prep Days	0		0		0		0		0		0		0
	Use Days	6		6		7		7		8		8		9
	Attendance	900		825		980		998		1,160		1,180		1,350

		Year One	% Change	Year Two	% Change	Year Three	% Change	Year Four	% Change	Year Five	% Change	Year Six	% Change	Year Seven
		OPENING YEAR												
	Ave Ticket Price	$20	3%	$21	3%	$21	3%	$22		$0	3%	$0	3%	$0
	Ticket Revenue	$18,000		$16,995		$20,794		$21,800		$0		$0		$0
	Rent Paid	$4,500		$4,635		$5,570		$5,737		$6,753		$6,956		$8,060
Rehearsal/Recital Hall	**Rehearsal/Recital Hall**	**Year One**		**Year Two**		**Year Three**		**Year Four**		**Year Five**		**Year Six**		**Year Seven**
	Performances	146		141		147		152		158		163		167
	Event Days	134		131		136		140		146		150		154
	Prep Days	96		98		101		103		106		108		109
	Use Days	230		229		237		242		251		257		264
	Attendance	34,900		31,213		33,750		35,125		37,780		39,228		40,500
	Ticket Revenue	$453,000		$413,159		$458,839		$492,793		$506,431		$543,317		$578,194
	Rent Paid	$65,250		$69,081		$73,878		$77,263		$83,316		$87,054		$92,733
Total Paid Attendance		140,900		127,588		135,400		140,750		148,905		154,503		160,750
Lobby Rentals														
Facility-presented Events	Event Days	2		2		2		2		2		2		2
	Rent Paid	0		0		0		0		0		0		0
Resident Rentals	Event Days	3		2		2		3		3		4		4
	Rent Paid	$2,400		$1,648		$1,697		$2,623		$2,701		$3,710		$3,821
Nonprofit Rentals	Event Days	2		2		2		2		2		2		2
	Rent Paid	$2,400		$2,472		$2,546		$2,623		$2,701		$2,782		$2,866
Private and Corporate Rentals	Event Days	6		6		6		6		6		6		6
	Rent Paid	$9,600		$9,888		$10,185		$10,490		$10,805		$11,129		$11,463
Lobby Rentals	**Lobby Rentals**	**Year One**		**Year Two**		**Year Three**		**Year Four**		**Year Five**		**Year Six**		**Year Seven**
	Event Days	13		12		12		13		13		14		14
	Rent Paid	$14,400		$14,008		$14,428		$15,735		$16,207		$17,621		$18,150

MULTI-YEAR PRO-FORMA OPERATING BUDGET		Pre-opening Year	% Change	Year One	% Change	Year Two	% Change	Year Three	% Change	Year Four	% Change	Year Five	% Change	Year Six	% Change	Year Seven
EARNED INCOME																
Live Presenting Box Office	Large Theatre			$875,000		$627,656		$700,194		$777,885		$861,014		$949,880		$1,044,796
	Rehearsal/Recital Hall			$70,000		$50,213		$56,016		$62,231		$68,881		$75,990		$83,584
Film Presenting	Large Theatre			$37,500		$38,625		$39,784		$40,977		$42,207		$43,473		$44,777
	Rehearsal/Recital Hall			$35,000		$30,128		$31,509		$36,606		$38,267		$43,994		$45,971
Rentals	Large Theatre			$302,578		$324,691		$346,284		$365,637		$389,180		$406,018		$427,060
	Rehearsal/Recital Hall			$65,250		$69,081		$73,878		$77,263		$83,316		$87,054		$92,733
	Lobby			$14,400		$14,008		$14,428		$15,735		$16,207		$17,621		$18,150
User Fees	Large Theatre			$226,934		$243,519		$259,713		$274,228		$291,885		$304,513		$320,295
	Rehearsal/Recital Hall			$32,625		$34,540		$36,939		$38,631		$41,658		$43,527		$46,367
	Lobby			$3,600		$3,502		$3,607		$3,934		$4,052		$4,405		$4,537
Concessions	Large Theatre			$265,000		$248,166		$269,601		$288,548		$312,680		$334,088		$358,962
	Rehearsal/Recital Hall			$87,250		$80,372		$89,513		$95,955		$106,304		$113,689		$120,898
Income from Catered Events	Rehearsal/Recital Hall Special Events			$4,000		$4,120		$4,244		$6,556		$6,753		$6,956		$7,164
	Lobby Special Events			$8,000		$8,240		$12,731		$13,113		$13,506		$13,911		$14,329
Other Income	Ticket Handling Fee			$281,800		$262,830		$287,292		$307,603		$335,188		$358,221		$383,888
	Facility Maintenance Fee			$246,575		$229,976		$251,380		$269,152		$293,289		$313,444		$335,902
	Total Earned Income	**$0**		**$2,555,512**		**$2,269,667**		**$2,477,114**		**$2,674,054**		**$2,904,388**		**$3,116,785**		**$3,349,412**
CONTRIBUTED INCOME	Local Government	$900,000	3%	$927,000	3%	$954,810	0%	$954,810	-3%	$926,166	-3%	$898,381	-3%	$871,429	-3%	$845,286
	Other Government			$25,000	3%	$25,750	3%	$26,523	3%	$27,318	3%	$28,138	3%	$28,982	3%	$29,851
	Individual Donations/Membership			$50,000	100%	$100,000	3%	$103,000	3%	$106,090	3%	$109,273	3%	$112,551	3%	$115,927
	Building Sponsorships			$150,000	3%	$154,500	3%	$159,135	3%	$163,909	3%	$168,826	3%	$173,891	3%	$179,108
	Corporate Donations			$50,000	100%	$100,000	3%	$103,000	3%	$106,090	3%	$109,273	3%	$112,551	3%	$115,927
	Corporate Event Sponsorships			$100,000	10%	$110,000	3%	$113,300	3%	$116,699	3%	$120,200	3%	$123,806	3%	$127,520
	Foundation					$100,000	3%	$103,000	3%	$106,090	3%	$109,273	3%	$112,551	3%	$115,927
	Capital Budget Allocation	$250,000		$150,000												
	Endowment Income	$0		$0		$25,000		$50,000		$100,000		$150,000		$200,000		$200,000
		$1,150,000		**$1,452,000**		**$1,570,060**		**$1,612,768**		**$1,652,362**		**$1,693,363**		**$1,735,761**		**$1,729,548**
	Total Income	**$1,150,000**		**$4,007,512**		**$3,839,727**		**$4,089,881**		**$4,326,416**		**$4,597,751**		**$4,852,546**		**$5,078,960**
OPERATING EXPENSES																
Full-time Personnel	Executive Director	$140,000	5%	$147,000	5%	$154,350	5%	$162,068	5%	$170,171	5%	$178,679	5%	$187,613	5%	$196,994
	Administrative Assistant	$55,000	5%	$57,750	5%	$60,638	5%	$63,669	5%	$66,853	5%	$70,195	5%	$73,705	5%	$77,391
	Development Director	$90,000	5%	$94,500	5%	$99,225	5%	$104,186	5%	$109,396	5%	$114,865	5%	$120,609	5%	$126,639
	Programming Director	$80,000	5%	$84,000	5%	$88,200	5%	$92,610	5%	$97,241	5%	$102,103	5%	$107,208	5%	$112,568
	Marketing Director	$80,000	5%	$84,000	5%	$88,200	5%	$92,610	5%	$97,241	5%	$102,103	5%	$107,208	5%	$112,568
	Education Director	$70,000	5%	$73,500	5%	$77,175	5%	$81,034	5%	$85,085	5%	$89,340	5%	$93,807	5%	$98,497
	Technical Director	$70,000	5%	$73,500	5%	$77,175	5%	$81,034	5%	$85,085	5%	$89,340	5%	$93,807	5%	$98,497
	Ticket Office Manager	$30,000		$60,000	5%	$63,000	5%	$66,150	5%	$69,458	5%	$72,930	5%	$76,577	5%	$80,406
	House Manager	$30,000		$60,000	5%	$63,000	5%	$66,150	5%	$69,458	5%	$72,930	5%	$76,577	5%	$80,406
	Grantwriter	$30,000		$60,000	5%	$63,000	5%	$66,150	5%	$69,458	5%	$72,930	5%	$76,577	5%	$80,406
	Food and Beverage Manager	$27,500		$55,000	5%	$57,750	5%	$60,638	5%	$63,669	5%	$66,853	5%	$70,195	5%	$73,705
	Maintenance Worker	$27,500		$55,000	5%	$57,750	5%	$60,638	5%	$63,669	5%	$66,853	5%	$70,195	5%	$73,705
	Sub-total	**$730,000**		**$904,250**		**$949,463**		**$996,936**		**$1,046,782**		**$1,099,122**		**$1,154,078**		**$1,211,781**
	Benefits	$153,300		$189,893		$199,387		$209,356		$219,824		$230,816		$242,356		$254,474
	Sub-total	**$883,300**		**$1,094,143**		**$1,148,850**		**$1,206,292**		**$1,266,607**		**$1,329,937**		**$1,396,434**		**$1,466,256**
Part-time Personnel	Food and Beverage Staff	$10,000		$40,000	3%	$41,200	3%	$42,436	3%	$43,709	3%	$45,020	3%	$46,371	3%	$47,762
	Ticket Office Staff	$10,000		$40,000	3%	$41,200	3%	$42,436	3%	$43,709	3%	$45,020	3%	$46,371	3%	$47,762
	Sub-total	**$20,000**		**$80,000**		**$82,400**		**$84,872**		**$87,418**		**$90,041**		**$92,742**		**$95,524**
	Benefits	$4,200		$16,800		$17,304		$17,823		$18,358		$18,909		$19,476		$20,060
	Sub-total	**$24,200**		**$96,800**		**$99,704**		**$102,695**		**$105,776**		**$108,949**		**$112,218**		**$115,584**
Event-based Labor	Projectionist			$5,200		$4,944		$5,092		$5,682		$5,853		$6,492		$6,687
	Stage Hands															
	Large Theatre			$303,840		$315,757		$335,881		$354,437		$376,370		$394,802		$416,724
	Rehearsal/Recital Hall			$69,000		$70,699		$75,303		$79,463		$84,818		$89,380		$94,497
	Event Security															
	Large Theatre			$55,600		$56,856		$60,683		$63,815		$67,981		$71,411		$75,464
	Rehearsal/Recital Hall			$14,600		$14,523		$15,595		$16,609		$17,783		$18,896		$19,941
	Event Cleaning															
	Large Theatre			$55,600		$56,856		$60,683		$63,815		$67,981		$71,411		$75,464
	Rehearsal/Recital Hall			$14,600		$14,523		$15,595		$16,609		$17,783		$18,896		$19,941
	House Staff															
	Large Theatre			$50,040		$51,170		$54,615		$57,434		$61,183		$64,270		$67,918
	Rehearsal/Recital Hall			$10,950		$10,892		$11,696		$12,457		$13,337		$14,172		$14,956
	Sub-total	**$0**		**$579,430**		**$596,221**		**$635,145**		**$670,322**		**$713,089**		**$749,732**		**$791,591**
Direct Costs of Live Presenting	Large Theatre			$820,000		$633,450		$695,950		$761,631		$830,626		$903,075		$979,123

MULTI-YEAR PRO-FORMA OPERATING BUDGET		Pre-opening	% Change	Year One	% Change	Year Two	% Change	Year Three	% Change	Year Four	% Change	Year Five	% Change	Year Six	% Change	Year Seven
	Rehearsal/Recital Hall			$62,000		$47,895		$52,621		$57,587		$62,803		$68,281		$74,031
	Sub-total	**$0**		**$882,000**		**$681,345**		**$748,571**		**$819,217**		**$893,429**		**$971,356**		**$1,053,154**
Direct Costs of Film Presenting	Large Theatre			$36,600		$37,698		$38,829		$39,994		$41,194		$42,429		$43,702
	Rehearsal/Recital Hall			$30,500		$27,347		$28,358		$32,673		$33,878		$38,639		$40,060
	Sub-total	**$0**		**$67,100**		**$65,045**		**$67,187**		**$72,666**		**$75,071**		**$81,068**		**$83,763**
Ticket Office	Network Maintenance	$2,500		$10,000		$20,000	3%	$20,600	3%	$21,218	3%	$21,855	3%	$22,510	3%	$23,185
	Postage	$7,045		$28,180		$26,283		$28,729		$30,760		$33,519		$35,822		$38,389
	Ticket Printing	$1,761		$7,045		$6,571		$7,182		$7,690		$8,380		$8,956		$9,597
	Supplies	$8,806		$35,225		$32,854		$35,911		$38,450		$41,898		$44,778		$47,986
	Credit Card Fees	$52,838		$211,350		$197,123		$215,469		$230,702		$251,391		$268,666		$287,916
	Sub-total	**$72,950**		**$291,800**		**$282,830**		**$307,892**		**$328,821**		**$357,042**		**$380,732**		**$407,073**
Administration	Institutional Promotion/Advertising	$5,000		$20,000												
	IT Service (provided by City of Lethbridge)	$15,000		$60,000												
	Printing & Publications	$2,500		$10,000												
	Office Equipment/Systems	$6,250		$25,000												
	Office Supplies/Services	$3,750		$15,000												
	Legal/Accounting	$3,750		$15,000												
	Volunteer Management	$1,875		$7,500												
	Professional Development/Conferences	$1,875		$7,500												
	Travel and Entertainment	$1,250		$5,000												
	Telephone	$2,500		$10,000												
	Miscellaneous	$1,250		$5,000												
	Sub-total	**$45,000**		**$180,000**	3%	**$185,400**	3%	**$190,962**	3%	**$196,691**	3%	**$202,592**	3%	**$208,669**	3%	**$214,929**
Building Expenses	Utilities	$24,000		$240,000		$247,200		$254,616		$262,254		$270,122		$278,226		$286,573
	Repairs and Maintenance	$11,250		$112,500		$115,875		$119,351		$122,932		$126,620		$130,418		$134,331
	Service Contracts	$7,500		$75,000		$77,250		$79,568		$81,955		$84,413		$86,946		$89,554
	Building Supplies	$7,500		$75,000		$78,750		$82,688		$86,822		$91,163		$95,721		$100,507
	Cleaning Supplies	$3,750		$37,500		$39,375		$41,344		$43,411		$45,581		$47,861		$50,254
	Technology Services	$7,500		$75,000	3%	$77,250	3%	$79,568	3%	$81,955	3%	$84,413	3%	$86,946	3%	$89,554
	Performance Equipment R&M	$7,500		$75,000	3%	$77,250	3%	$79,568	3%	$81,955	3%	$84,413	3%	$86,946	3%	$89,554
	Trash Hauling	$5,000		$50,000	3%	$51,500	3%	$53,045	3%	$54,636	3%	$56,275	3%	$57,964	3%	$59,703
	Security System	$2,500		$25,000	3%	$25,750	3%	$26,523	3%	$27,318	3%	$28,138	3%	$28,982	3%	$29,851
	Sub-total	**$76,500**		**$765,000**		**$790,200**		**$816,269**		**$843,237**		**$871,139**		**$900,008**		**$929,880**
TOTAL OPERATING EXPENSES		**$1,101,950**		**$3,956,273**		**$3,849,594**		**$4,075,012**		**$4,303,338**		**$4,551,248**		**$4,800,216**		**$5,062,230**
SURPLUS/(DEFICIT)		**$48,050**		**$51,239**		**-$9,867**		**$14,869**		**$23,078**		**$46,503**		**$52,330**		**$16,729**
	Earned Income as % of Op Expenses	0%		65%		59%		61%		62%		64%		65%		66%
MARGINS, RATIOS AND FORMULAS																
Escalation Rate			3%		3%		3%		3%		3%		3%		3%	
Gross Square Footage				150,000		150,000		150,000		150,000		150,000		150,000		150,000
User Fees as a % of Rent	Large Theatre			75%		75%		75%		75%		75%		75%		75%
	Rehearsal/Recital Hall			50%		50%		50%		50%		50%		50%		50%
	Lobby			25%		25%		25%		25%		25%		25%		25%
Hospitality	Net concession income per capita			$2.50	3%	$2.58	3%	$2.65	3%	$2.73	3%	$2.81	3%	$2.90	3%	$2.99
Catered Events	Number of Small Theatre Events			2		2		2		3		3		3		3
	Net Fee per Rec/Reh Hall Event			$2,000	3%	$2,060	3%	$2,122	3%	$2,185	3%	$2,251	3%	$2,319	3%	$2,388
	Number of Lobby Events			2		2		3		3		3		3		3
	Net Fee per Lobby Event			$4,000	3%	$4,120	3%	$4,244	3%	$4,371	3%	$4,502	3%	$4,637	3%	$4,776
Ticket Handling Fee	% of tickets sold online			50%		50%		50%		50%		50%		50%		50%
	Charge per ticket sold online			$3.00	3%	$3.09	3%	$3.18	3%	$3.28	3%	$3.38	3%	$3.48	3%	$3.58
	% of tickets sold by telephone			20%		20%		20%		20%		20%		20%		20%
	Charge per ticket sold by phone			$2.50	3%	$2.58	3%	$2.65	3%	$2.73	3%	$2.81	3%	$2.90	3%	$2.99
	% of tickets sold at box office			30%		30%		30%		30%		30%		30%		30%
	Charge per ticket sold at box office			$0.00	3%	$0.00	3%	$0.00	3%	$0.00	3%	$0.00	3%	$0.00	3%	$0.00
Facility Maintenance Fee	Charge per Ticket Sold			$1.75	3%	$1.80	3%	$1.86	3%	$1.91	3%	$1.97	3%	$2.03	3%	$2.09
Endowment Income	Endowment Size					$500,000		$1,000,000		$2,000,000		$3,000,000		$4,000,000		$4,000,000
	Rate of Return					5%		5%		5%		5%		5%		5%
Benefits Level	Full-time Staff	21%		21%		21%		21%		21%		21%		21%		21%
	Part-time Staff	21%		21%		21%		21%		21%		21%		21%		21%
				Cost/Screening												
Event-based Labor	Projectionist			$200	3%	$206	3%	$212	3%	$219	3%	$225	3%	$232	3%	$239
	Stage Hands Charge			Cost/Use Day												
	Large Theatre			$1,600	3%	$1,648	3%	$1,697	3%	$1,748	3%	$1,801	3%	$1,855	3%	$1,910

MULTI-YEAR PRO-FORMA OPERATING BUDGET

		Pre-opening	% Change	Year One	% Change	Year Two	% Change	Year Three	% Change	Year Four	% Change	Year Five	% Change	Year Six	% Change	Year Seven
	Rehearsal/Recital Hall			$300	3%	$309	3%	$318	3%	$328	3%	$338	3%	$348	3%	$358
	Event Security			Cost/Perf												
	Large Theatre			$400	3%	$412	3%	$424	3%	$437	3%	$450	3%	$464	3%	$478
	Rehearsal/Recital Hall			$100	3%	$103	3%	$106	3%	$109	3%	$113	3%	$116	3%	$119
	Event Cleaning			Cost/Perf												
	Large Theatre			$400	3%	$412	3%	$424	3%	$437	3%	$450	3%	$464	3%	$478
	Rehearsal/Recital Hall			$100	3%	$103	3%	$106	3%	$109	3%	$113	3%	$116	3%	$119
	House Staff			Cost/Perf.												
	Large Theatre			$360	3%	$371	3%	$382	3%	$393	3%	$405	3%	$417	3%	$430
	Rehearsal/Recital Hall			$75	3%	$77	3%	$80	3%	$82	3%	$84	3%	$87	3%	$90
Live Presenting Expenses and Result																
Large Theatre	Performances			20		15		16		17		18		19		20
	Gross Ticket Revenues/Performance			$43,750		$41,844		$43,762		$45,758		$47,834		$49,994		$52,240
	Average Artist Fees			$32,500	3%	$33,475	3%	$34,479	3%	$35,514	3%	$36,579	3%	$37,676	3%	$38,807
	Marketing Costs			$7,500	3%	$7,725	3%	$7,957	3%	$8,195	3%	$8,441	3%	$8,695	3%	$8,955
	Other Direct Presenting Costs			$1,000	3%	$1,030	3%	$1,061	3%	$1,093	3%	$1,126	3%	$1,159	3%	$1,194
	Total Direct Costs/Performance			$41,000		$42,230		$43,497		$44,802		$46,146		$47,530		$48,956
	Net Revenue/Performance			$2,750		-$386		$265		$956		$1,688		$2,463		$3,284
Rehearsal/Recital Hall	Performances			20		15		16		17		18		19		20
	Gross Ticket Revenues/Performance			$3,500		$3,348		$3,501		$3,661		$3,827		$3,999		$4,179
	Average Artist Fees			$2,500	3%	$2,575	3%	$2,652	3%	$2,732	3%	$2,814	3%	$2,898	3%	$2,985
	Marketing Costs			$500	3%	$515	3%	$530	3%	$546	3%	$563	3%	$580	3%	$597
	Other Direct Presenting Costs			$100	3%	$103	3%	$106	3%	$109	3%	$113	3%	$116	3%	$119
	Total Direct Costs/Performance			$3,100		$3,193		$3,289		$3,387		$3,489		$3,594		$3,702
	Net Revenue/Performance			$400		$155		$212		$273		$338		$406		$478
Film Presenting Expenses																
Large Theatre	Screenings			6		6		6		6		6		6		6
	Gross Ticket Revenues/Screening			$6,250		$6,438		$6,631		$6,830		$7,034		$7,245		$7,463
	Average Artist Fees			40%		40%		40%		40%		40%		40%		40%
	Marketing Costs			$3,000	3%	$3,090	3%	$3,183	3%	$3,278	3%	$3,377	3%	$3,478	3%	$3,582
	Other Direct Presenting Costs			$600	3%	$618	3%	$637	3%	$656	3%	$675	3%	$696	3%	$716
	Total Cost/Screening			$6,100		$6,283		$6,471		$6,666		$6,866		$7,072		$7,284
	Net Revenue/Screening			$150		$155		$159		$164		$169		$174		$179
Rehearsal/Recital Hall	Screenings			20		18		18		20		20		22		22
	Gross Ticket Revenues/Screening			$1,750		$1,674		$1,750		$1,830		$1,913		$2,000		$2,090
	Average Artist Fees			40%		40%		40%		40%		40%		40%		40%
	Marketing Costs			$750	3%	$773	3%	$796	3%	$820	3%	$844	3%	$869	3%	$896
	Other Direct Presenting Costs			$75	3%	$77	3%	$80	3%	$82	3%	$84	3%	$87	3%	$90
	Total Cost/Screening			$1,525		$1,519		$1,575		$1,634		$1,694		$1,756		$1,821
	Net Revenue/Screening			$225		$155		$175		$197		$219		$243		$269
				Cost/Attender		Cost/Attender		Cost/Attender		Cost/Attender		Cost/Attender		Cost/Attender		Cost/Attender
Ticketing Services	Postage			$0.20	3%	$0.21	3%	$0.21	3%	$0.22	3%	$0.23	3%	$0.23	3%	$0.24
	Ticket Printing			$0.05	3%	$0.05	3%	$0.05	3%	$0.05	3%	$0.06	3%	$0.06	3%	$0.06
	Supplies			$0.25	3%	$0.26	3%	$0.27	3%	$0.27	3%	$0.28	3%	$0.29	3%	$0.30
	Credit Card Fees			$1.50	3%	$1.55	3%	$1.59	3%	$1.64	3%	$1.69	3%	$1.74	3%	$1.79
				Cost/SF		**Cost/SF**		**Cost/SF**		**Cost/SF**		**Cost/SF**		**Cost/SF**		**Cost/SF**
Occupancy Costs	Utilities			$1.60	3%	$1.65	3%	$1.70	3%	$1.75	3%	$1.80	3%	$1.85	3%	$1.91
	Repairs and Maintenance			$0.75	3%	$0.77	3%	$0.80	3%	$0.82	3%	$0.84	3%	$0.87	3%	$0.90
	Service Contracts			$0.50	3%	$0.52	3%	$0.53	3%	$0.55	3%	$0.56	3%	$0.58	3%	$0.60
	Building Supplies			$0.50	3%	$0.52	3%	$0.53	3%	$0.55	3%	$0.56	3%	$0.58	3%	$0.60
	Cleaning Supplies			$0.25	3%	$0.26	3%	$0.27	3%	$0.27	3%	$0.28	3%	$0.29	3%	$0.30
Total Non-personnel Expenses				$2,185,900		$2,004,820		$2,130,880		$2,260,632		$2,399,273		$2,541,833		$2,688,799

Operating Budget Summary	Pre-opening Year	Year One	Year Two	Year Three	Year Four	Year Five	Year Six	Year Seven
Total Paid Attendance		140,900	127,588	135,400	140,750	148,905	154,503	160,750
Earned Income	$0	$2,555,512	$2,269,667	$2,477,114	$2,674,054	$2,904,388	$3,116,785	$3,349,412
Contributed Income	$1,150,000	$1,452,000	$1,570,060	$1,612,768	$1,652,362	$1,693,363	$1,735,761	$1,729,548
Total Income	$1,150,000	$4,007,512	$3,839,727	$4,089,881	$4,326,416	$4,597,751	$4,852,546	$5,078,960
Operating Expenses	$1,101,950	$3,956,273	$3,849,594	$4,075,012	$4,303,338	$4,551,248	$4,800,216	$5,062,230
Surplus/(Deficit)	$48,050	$51,239	-$9,867	$14,869	$23,078	$46,503	$52,330	$16,729
Earned. Income as % of Op Exp	0%	65%	59%	61%	62%	64%	65%	66%

Contributed Income Summary	Pre-opening Year	Year One	Year Two	Year Three	Year Four	Year Five	Year Six	Year Seven
Local Government	$900,000	$927,000	$954,810	$954,810	$926,166	$898,381	$871,429	$845,286
Other Government	$0	$25,000	$25,750	$26,523	$27,318	$28,138	$28,982	$29,851
Individual Donations/Membership	$0	$50,000	$100,000	$103,000	$106,090	$109,273	$112,551	$115,927
Building Sponsorships	$0	$150,000	$154,500	$159,135	$163,909	$168,826	$173,891	$179,108
Corporate Donations	$0	$50,000	$100,000	$103,000	$106,090	$109,273	$112,551	$115,927
Corporate Event Sponsorships	$0	$100,000	$110,000	$113,300	$116,699	$120,200	$123,806	$127,520
Foundation	$0	$0	$100,000	$103,000	$106,090	$109,273	$112,551	$115,927
Capital Budget Allocation	$250,000	$150,000	$0	$0	$0	$0	$0	$0
Endowment Income	$0	$0	$25,000	$50,000	$100,000	$150,000	$200,000	$200,000
Total Contributed Income	**$1,150,000**	**$1,452,000**	**$1,570,060**	**$1,612,768**	**$1,652,362**	**$1,693,363**	**$1,735,761**	**$1,729,548**

Present Value of Year One Results		
Operating Budget Summary	**Present Value**	**Year One**
Earned Income	$2,270,539	$2,555,512
Contributed Income	$1,290,083	$1,452,000
Total Income	$3,560,622	$4,007,512
Operating Expenses	$3,515,097	$3,956,273
Surplus/(Deficit)	$45,525	$51,239
Contributed Income Summary	**Present Value**	**Year One**
Local Government	$823,627	$927,000
Other Government	$22,212	$25,000
Individual Donations/Membership	$44,424	$50,000
Building Sponsorships	$133,273	$150,000
Corporate Donations	$44,424	$50,000
Corporate Event Sponsorships	$88,849	$100,000
Foundation	$0	$0
Capital Budget Allocation	$133,273	$150,000
Endowment Income	$0	$0
Total Contributed Income	$1,290,083	$1,452,000

Reference Points

Venue	Yates Centre (2012 Proposed Rates)	Conexus Arts Centre	Royal Theatre/McPherson Playhouse	Esplanade Center	Lethbridge City Hall Lobby	Galt Museum - Viewing Gallery	Coast Hotel
Location	Lethbridge, AL	Regina, SK	Victoria, BC	Medecine Hat, AB	Lethbridge, AB	Lethbridge, AB	Lethbridge, AB
Theater Capacity space 1	488	2,031	1434	710			
Theater Capacity space 2	122		772	140			
Lobby Capacity For Events	200 (Mezzanine)	375			200 for a standing reception; 175 for tables	220 reception style; 200 theatre style; 150 round table style	100-capacity Grand Ballroom
Rehearsal Hall/Multipurpose Facility Capacity	N/A	1,400 (Convention Hall)					
Meeting Facility 1	50 (Green Room)	300				36	
Meeting Facility 2		70				10	
Meeting Facility 3		50				6	
Meeting Facility 4		40					
Meeting Facility 5		70					
Meeting Facility 6		25					
Theater Rental Rates				8-hr Day			
Commercial, space 1	$1,640 - $2,005	$1,950 for 5 Hours vs. 10% of gross less GST and ticket surcharges	$1,825 for 6 Hours vs 10% of gross rate	$970 - $1,035 for one performance; $1,400 for concerts; $1.50 seat levy			
Comm. Matinee 1	$1,069 - $1,397	$1,950 for 5 Hours vs. 10% of gross less GST and ticket surcharges	$1,825 for 6 Hours vs 10% of gross rate	$970 - $1,035 for one performance; $1,400 for concerts; $1.50 seat levy			
Non-profit, space 1	$546 - $1,670	$1,450	$1,495 for 6 Hours	$485 - $550 for one performance; $1.50 seat levy			
NP Matinee 1	$306 - $1,239	$1,450	$1,495 for 6 Hours	$485 - $550 for one performance; $1.50 seat levy			
Commercial, space 2	$627 - $702	--	$625 - $875 for 6 Hours	$165 - $245 for one performance: $1.50 seat levy			
Comm. Matinee 2	$504 - $627	--	$625 - $875 for 6 Hours	$165 - $245 for one performance; $1.50 seat levy			
Non-profit, space2	$158 - $626	--	$595 - $850 for 6 Hours	$100 - $145 for one performance; $1.50 seat levy			
NP Matinee 2	$104 - $502	--	$595 - $850 for 6 Hours	$100 - $145 for one performance; $1.50 seat levy			
Overtime	--	--	$44/ Hour	--			
Rehearsal/Prep space 1	$36 - $68	--	$155/hr or $1,275/day	$430 for 4 hours			
Rehearsal/Prep non-profit space 1	$36 - $69	--	$77.5/Hour or $625 / day	$120 for 4 hours			
Rehearsal/Prep space 2		--	$87.50 / Hour or $875 / day	--			
Rehearsal/Prep non-profit space 2		--	$44/ Hour or $440/ day	--			
Additional Performance - Same Day	N/A	-- $1,950	N/A	$245 - $605			
Business Meeting	$167/ Hour	$850 - $1,450		Studio Theatre - $180 - $330			
Lobby/Event Space Rental Rates				Note: First Floor Lobby & Second Floor Priced Seperateley	No Events involving Money; Limited use on weekdays		
Commercial	Included in Rental	Included in Rental	Included in Rental	$230	$44 - $66/hr	$500 half day / $700 Full Day for Event; Wedding $1,500 package	$500 - $2,000; trade show up to $4,000
Business Meeting		$350 - $450		$230			
Nonprofit				$210	$27 - $46/hr		
				Note: $50/Hour for setup			
Rehearsal Hall/Multi-purpose Room		Convention Hall					
Commercial		$850 - $1,450					
Non-profit							
Ticketing Fees							
Ticket Set-up		$100 per set	Included in cost of rental	Included in cost of rental			
Service Charger per Ticket		5% commission	$2.50 - $8.00/ticket	$1.50 for commercial & nonprofit users; $1.00 for local arts groups			
Online Ticket Set-up		--	Included in cost of rental	Included in cost of rental			
Patron Service Charge	$1.50 - $5.00	$1.50					
Parking Charge	--	$1.00	--	$5.00 (Surface/Parkcade)			
Staff Fees Per Hour	N'Joy Hostesssing						
Front of House Staff		$18 - $21/hr	$19 - $42/hr				

Reference Points

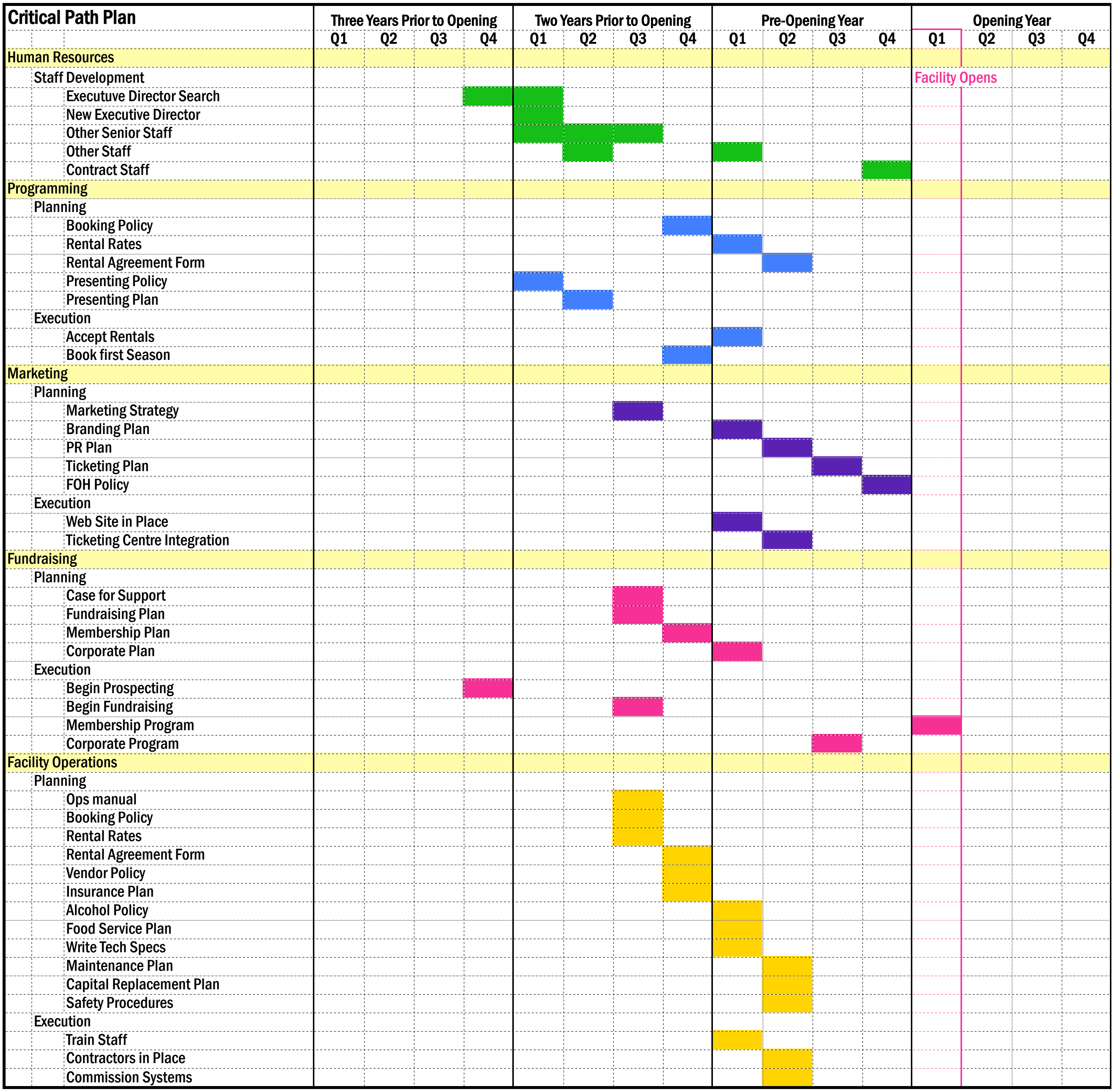
Venue	Yates Centre (2012 Proposed Rates)	Conexus Arts Centre	Royal Theatre/McPherson Playhouse	Esplanade Center	Lethbridge City Hall Lobby	Galt Museum - Viewing Gallery	Coast Hotel
Stage Technicians	$227 + GST For the Evening - 1 House Staff + 3 Ushers	$22/hr - $48.75/hr	$28 - $30/hr				
Audio/Visual Engineer		$32.50 - $48.75/hr	$33/hr	$48			
Sound Engineer		$32.50 - $48.75/hr	$33/hr				
Lighting Engineer/Electrician		$32.50 - $48.75/hr	$28/hr				
Technical Director		$24/hr	$44.25/hr				
Security		$20/hr	--				
Police		--	--				
Ticket Prices (Low to High)							
Presented Tier A	N/A	$70-$120		$40 -$50			
Presented Tier B	N/A	$60-$75	$30 - $70	$35 - $45			
Presented Tier C	N/A	$20 - $60		$25 - $35			
Local Region Arts Users	$15 to $25	$22 - $52	$22 - $120				
Benefits							
Full-time Staff (%)			24% - 28%	30%			
Part-time Staff (%)		8% - 15%	23%	12.5 - 30.75%			
Buiding Expenses		Building owned by Government; major expenses covered by operating grant		$1,119,679			
Utilities		$408,000	$70,000	$219,610			
Repairs and Maintenance		Supported by Gov't	$66,000 *major upkeep paid by building owner is $400,000/yr				
Service Contracts			$10,000				
Building Supplies			$16,000				
Concessions Income	N/A	$550,000	$170,000	$5,000			
Catering Income	N/A	$1.7 Million	--	No catering agreements; small café onsite but can't do large events			
FTE Count		26 + PT	20	30.5			
Admin Costs		$300,000	$186,000	Many expenses handled by City; internal legal, postage, purchasing			

Sensitivity Analysis		Base Case	% Change	25% Activity Drop	% Change	50% Activity Drop
EARNED INCOME						
Live Presenting Box Office	Large Theatre	875,000	-25%	656,250	-50%	437,500
	Rehearsal/Recital Hall	70,000	-25%	52,500	-50%	35,000
Film Presenting	Large Theatre	37,500	-25%	28,125	-50%	18,750
	Rehearsal/Recital Hall	35,000	-25%	26,250	-50%	17,500
Rentals	Large Theatre	302,578	-25%	226,934	-50%	151,289
	Rehearsal/Recital Hall	65,250	-25%	48,938	-50%	32,625
	Lobby	14,400	-25%	10,800	-50%	7,200
User Fees	Large Theatre	226,934	-25%	170,200	-50%	113,467
	Rehearsal/Recital Hall	32,625	-25%	24,469	-50%	16,313
	Lobby	3,600	-25%	2,700	-50%	1,800
Concessions	Large Theatre	265,000	-25%	198,750	-50%	132,500
	Rehearsal/Recital Hall	87,250	-25%	65,438	-50%	43,625
Income from Catered Events	Rehearsal/Recital Hall Special Events	4,000	-25%	3,000	-50%	2,000
	Lobby Special Events	8,000	-25%	6,000	-50%	4,000
Other Income	Ticket Handling Fee	281,800	-25%	211,350	-50%	140,900
	Facility Maintenance Fee	246,575	-25%	184,931	-50%	123,288
	Total Earned Income	2,555,512		1,916,634		1,277,756
OPERATING EXPENSES						
Full-time Personnel	Executive Director	147,000				
	Administrative Assistant	57,750				
	Development Director	94,500				
	Programming Director	84,000				
	Marketing Director	84,000				
	Education Director	73,500				
	Technical Director	73,500				
	Ticket Office Manager	60,000				
	House Manager	60,000				
	Grantwriter	60,000				
	Food and Beverage Manager	55,000				
	Maintenance Worker	55,000				
	Sub-total	904,250				
	Benefits	189,893				
	Sub-total	1,094,143	0%	1,094,143	0%	1,094,143
Part-time Personnel	Food and Beverage Staff	40,000				
	Ticket Office Staff	40,000				
	Sub-total	80,000				
	Benefits	16,800				
	Sub-total	96,800	-15%	82,280	-30%	67,760
Event-based Labor	Projectionist	5,200				
	Stage Hands					
	Large Theatre	303,840				
	Rehearsal/Recital Hall	69,000				
	Event Security					
	Large Theatre	55,600				
	Rehearsal/Recital Hall	14,600				
	Event Cleaning					
	Large Theatre	55,600				
	Rehearsal/Recital Hall	14,600				
	House Staff					
	Large Theatre	50,040				
	Rehearsal/Recital Hall	10,950				
	Sub-total	579,430	-25%	434,573	-50%	289,715
Direct Costs of Live Presenting	Large Theatre	820,000				
	Rehearsal/Recital Hall	62,000				
	Sub-total	882,000	-25%	661,500	-50%	441,000

Direct Costs of Film Presenting	Large Theatre	36,600				
	Rehearsal/Recital Hall	30,500				
	Sub-total	67,100	-25%	50,325	-50%	33,550
Ticket Office	Network Maintenance	10,000				
	Postage	28,180				
	Ticket Printing	7,045				
	Supplies	35,225				
	Credit Card Fees	211,350				
	Sub-total	291,800	-15%	248,030	-30%	204,260
Administration	Institutional Promotion/Advertising	20,000				
	IT Service (provided by City of Lethbridge)	60,000				
	Printing & Publications	10,000				
	Office Equipment/Systems	25,000				
	Office Supplies/Services	15,000				
	Legal/Accounting	15,000				
	Volunteer Management	7,500				
	Professional Development/Conferences	7,500				
	Travel and Entertainment	5,000				
	Telephone	10,000				
	Miscellaneous	5,000				
	Sub-total	180,000	-15%	153,000	-30%	126,000
Building Expenses	Utilities	240,000				
	Repairs and Maintenance	112,500				
	Service Contracts	75,000				
	Building Supplies	75,000				
	Cleaning Supplies	37,500				
	Technology Services	75,000				
	Performance Equipment R&M	75,000				
	Trash Hauling	50,000				
	Security System	25,000				
	Sub-total	765,000	-10%	688,500	-20%	612,000
TOTAL OPERATING EXPENSES		3,956,273		3,412,350		2,868,428
ANNUAL FUNDING REQUIREMENT		1,400,761		1,495,716		1,590,672

Sensivity to Activity Decine	**Year One Base**		**25% Drop**		**50% Drop**
Attendance	140,900	-25%	105,675	-50%	70,450
Earned Income	2,555,512	-25%	1,916,634	-50%	1,277,756
Operating Expenses	3,956,273	-14%	3,412,350	-27%	2,868,428
Annual Funding Requirement	1,400,761	7%	1,495,716	14%	1,590,672
Earned Income as % of Op Exp	65%		56%		45%

appendix d:
critical path plan


Critical Path Plan
Three Years Prior to Opening
Two Years Prior to Opening
Pre-Opening Year
Opening Year
Q1
Q2
Q3
Q4
Human Resources
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Executuve Director Search
New Executive Director
Other Senior Staff
Other Staff
Contract Staff
Facility Opens
Programming
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Rental Agreement Form
Presenting Policy
Presenting Plan
Execution
Accept Rentals
Book first Season
Marketing
Planning
Marketing Strategy
Branding Plan
PR Plan
Ticketing Plan
FOH Policy
Execution
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Fundraising
Planning
Case for Support
Fundraising Plan
Membership Plan
Corporate Plan
Execution
Begin Prospecting
Begin Fundraising
Membership Program
Corporate Program
Facility Operations
Planning
Ops manual
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Rental Rates
Rental Agreement Form
Vendor Policy
Insurance Plan
Alcohol Policy
Food Service Plan
Write Tech Specs
Maintenance Plan
Capital Replacement Plan
Safety Procedures
Execution
Train Staff
Contractors in Place
Commission Systems

appendix e:
economic impact multipliers

ALBERTA ECONOMIC MULTIPLIERS

2005

June, 2009

Alberta Economic Multipliers 2005

PREFACE

This publication presents economic multipliers, intensity ratios and supply ratios for the Alberta economy calculated using the 2005 Alberta Finance and Enterprise, Statistics Input-Output Model. Information is provided for both the open (direct and indirect impacts) and closed (direct, indirect and induced impacts) forms of the model. Economic impacts are presented for the Alberta economy only.

The tables used in this publication are derived from the 2005 interprovincial Input-Output tables released by Statistics Canada in November, 2008. Most of the employment numbers in this publication are lower than the 2003 publication due to revised employment vectors produced by Statistics Canada.

Custom Impact Analyses

In addition to this publication, Alberta Finance and Enterprise, Statistics maintains a highly disaggregated Input-Output Model for 2005 at the link level which covers 302 industries and 727 commodities. The model may be used to simulate directly both open and closed impacts where additional precision or more detailed output is required than is presented in this publication. The Alberta input-output model industry and commodity structure can also be customized to client specifications to make it more descriptive of changing economic conditions.

The I/O Model also has a Tax Module that provides impacts on Federal, Provincial and Local Tax Revenues.

Inquiries concerning this publication or requests for simulations using the 2005 Alberta Input-Output Model should be directed to:

Alberta Finance and Enterprise, Statistics
545, Terrace Building
9515-107 Street
Edmonton, Alberta
Canada T5K 2C3

Phone: (780) 427-3099
Fax: (780) 427-0409

Alberta Economic Multipliers 2005

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INTRODUCTION

Estimates of Alberta Gross Domestic Product (GDP) found in the income and expenditure accounts of the Alberta Economic Accounts provide unduplicated measures of economic production. They are “unduplicated” because GDP measures the value of final transactions only, with all inter-business purchases and sales associated with intermediate production cancelled out.

For example, the value of a good or service sold by industry A to industry B, and then used in industry B’s production process for sale into final demand, is not directly recorded in GDP. Industry A’s output is not counted directly because it is implicitly included in the value of output of industry B when it is sold into final demand. If the output of industry A were counted when it is sold as an intermediate good or service, the value of this output would be double counted - once when it was sold as an intermediate input to industry B, and again as part of the value of the output of Industry B when it sells its output into final demand. To avoid this problem, goods or services are valued only at the point where they are sold into final demand (i.e., to households for consumption, to business for investment, or to government for current or capital expenditure) or when they are exported.

A by-product of measuring GDP in this fashion is that the record of such intermediate transactions is lost and, as a result, extremely useful information concerning the economic linkages between industries is not revealed. The input-output accounts bring back into record these inter-industry flows of good and services, detailing gross output of commodities by producing industries, industry use of such commodities and primary inputs, and the final consumption and investment of commodities plus any direct purchases of primary inputs for final demand.

The most common components of the input-output model are economic multipliers which include commodity and industry intensity ratios as well as industry multipliers. The concept of a multiplier is a fairly simple one to understand. For example, an increase in demand for a commodity will produce three effects which are described by economic multipliers. The first is the impact on industries (firms) which expand production to satisfy increased demand. These effects are termed the ***direct impacts*.** Secondly, there is a ripple effect as these firms purchase additional required inputs from other firms. These effects are termed the indirect impacts. Lastly, as firms expand production, they also hire more staff and pay out wages thereby increasing the income received by employees. Households, after withdrawing a certain portion for taxes and savings, spend this income which in turn increases demand for other commodities. These impacts are termed ***induced effects*.**

Economic multipliers presented in this report are expressed in two forms: as industry multipliers and as intensity ratios for industries and commodities.

Industry multipliers are calculated by taking the total impact observed for a change in an economic variable and dividing it by the direct change. For example, if adding 100 jobs (the direct change) to an industry's workforce resulted in a total increase of 180 jobs (the total change) in the economy overall, the industry employment multiplier would be 1.8.

Industry multipliers are presented in ratio form and cannot be less than one since the direct impact is included in both the numerator and denominator. **Users are cautioned that they must know the direct impact on GDP at basic prices, labour income, or person years of employment before they can use this type of multiplier.**

Intensity ratios for commodities and industries are calculated by dividing the total economic impact by the change in consumption or output that led to the change. For example, if an industry increases its output by $5.0 million and this leads to an increase of $4.0 million in Alberta GDP, the intensity ratio would be 0.80 (that is 4.0/5.0). Intensity ratios are particularily useful for users because they are applied to gross output or expenditure, unlike absolute multipliers which have to be applied to the direct change. This is the type of “multiplier” that most users should use since they generally know the direct change in revenue or expenditure, but don't know the direct change in GDP that they are interested in analyzing.

There are two main kinds of multipliers. The first are called “open” multipliers which reflect only direct and indirect effects, and are derived from the open model. The second type of multipliers are called “closed” multipliers and include induced impacts as well as direct and indirect effects. These multipliers are derived from the closed model.

THE OPEN AND CLOSED MODEL

The Alberta Finance and Enterprise, Statistics Input-Output Model (open version) provides estimates of direct and indirect economic impacts. Results based on the Alberta open model are virtually identical to those provided by the Statistics Canada interregional input-output model since both models are based on Statistics Canada input-output tables.

There are two significant difference between the Statistics Canada model and the Alberta Finance and Enterprise Model. While both models provide estimates of direct and indirect production, the Alberta Finance and Enterprise Model also provides estimates of induced economic impacts when the model is closed to households. The second is that the Statistics Canada model provides inter-provincial impact, while the Alberta Finance and Enterprise model provides impacts for Alberta only.

For the closed version of the Alberta input-output model, the household sector is treated as a production sector. The input of the household sector is consumer expenditure on goods and services, while output is labour income (consisting of wages and salaries, supplementary labour income, and net income of unincorporated business). It is assumed that households, after withdrawing a portion of their income for savings and taxes, spend the rest of their income on consumer goods and services. Closing an input-output model to households increases the interdependence of the system and results in a higher impact on the variables of the model leading to multipliers of a larger magnitude than those based on the open version.

The impacts of closing the system to households are referred to as induced effects.

The closed model has been criticized because it introduces a bias in favor of those economic projects with a higher labour content. For example, consider the case where two projects have the identical purchased inputs and the same level of direct GDP, but where one project has a higher proportion of labour income and the other a higher proportion of other operating surplus (e.g., corporate profits). For this case, the closed model will estimate a larger economic impact for the project with the higher proportion of labour income (other things being equal). This result occurs because the model has been “closed” to household spending but not to profits and the induced impacts estimated by the model are related to the level of household income rather than profits.

Results from both the open and closed (to households) models are presented in this publication. This approach allows users to use both versions for the purposes of analysis and to judge for themselves where the inclusion of induced impacts is warranted or advisable.

PRODUCER AND PURCHASER PRICES

Commodity intensity ratios are presented in both producer and purchaser prices. Data that are measured in producer prices reflect the price received directly by the producer of the commodity. For example, this corresponds to the "farm gate" price in agriculture or the price received directly by a producing establishment in manufacturing.

Data in purchaser prices reflect the price paid by the final users of the good. This price, in addition to price received by the producer of the commodity, reflects other costs such as the price of transportation from the producer to the final seller, wholesale and retail mark-ups, and commodity indirect taxes.

These other costs which are added to producer prices to derive purchaser prices are referred to as margins. The model treats these margins as if they were purchased directly by the purchaser of the final good. For example, if a consumer purchases a television set from a retail outlet in Alberta, the model would treat the transaction as if the consumer had purchased separately the retail and wholesale mark-ups, the transportation costs from the producer to the seller, indirect taxes, and the actual price of the television set received by the producer.

USES AND LIMITATIONS OF MULTIPLIERS

Uses

Economic multipliers based on input-output models are a very useful tool in the decision making process, but users should be aware of their limitations. Firstly, input-output models (and the multipliers derived from these models) are static and not subject to the limits of production capacity. Secondly, these models reflect industry averages for technology use and average input costs. For these and other reasons, an input-output model will not provide a totally complete or absolute measure of the impact of economic change.

The most common use for multipliers is to estimate the economic impact associated with the establishment of a new firm; or the expansion, contraction or closure of existing firms. In these cases, it is preferable to use economic multipliers for relative rather than absolute comparisons due to the limitations of input-output models. For example, while economic multiplier analysis may be used to determine which activity has the largest economic impact, it should not be used to estimate the absolute impact of any single activity. Where multipliers are used to estimate the impacts of a single activity, the results should be treated as general estimates only and not as absolute values.

For example, if there is an increased demand for a commodity, the Alberta input-output model (and the multipliers included in this report) assume that:

- production increases can be met with no change in capacity (e.g., the construction of new plants);
- Alberta industries are able to maintain a fixed share of the market for the commodity with the remainder imported from outside the province; and
- increased output in Alberta occurs at industry average production costs using 2005 technology.

Limitations

It is unlikely that any of these assumptions would hold fully in the real world. In all likelihood, there would be some change in market share for Alberta industries and the marginal costs associated with increased output may be greater or less than average costs depending on the level of capacity utilization. In addition, significant changes in technology may have occurred for some industries since 2005.

When using the employment multipliers, **users are cautioned that these multpliers show the total number of jobs that are required to support the change in activity being considered. The I/O model cannot distinguish between full-time jobs and part-time jobs.** Also, when the economy is running at full employment, **users are cautioned to remember that the number of jobs required for a particular project must come from other projects/industries or from outside the province. The I/O model does not indicate new jobs created – only the number of jobs required to support a given level of economic activity.** As indicated above, the I/O model assumes unlimited capacity, whereas in reality, there are a limited number of people in the workforce.

Some of these limitations may be overcome by using an updated industry input structure based on more current data, and subjecting this revised information to a computer simulation using the input-output model developed by Alberta Finance and Enterprise. If users wish to exercise this option they should contact the Statistics Section of Alberta Finance and Enterprise directly.

Alberta Economic Multipliers 2005

DESCRIPTION OF ECONOMIC MULTIPLIER TABLES

In this publication, economic multipliers are presented for gross domestic product (at basic prices), labour income, employment and gross production. Below is a brief description of each of the tables contained in this report and how they should be used. Tables 1 to 4 present results from the open model, while tables 5-8 present results from the closed model. Table 9 presents commodity supply ratios for Alberta.

TABLE 1: **OPEN MODEL**

Industry Intensity Ratios

Table 1 presents multipliers for the direct and indirect effects on the Alberta economy due to a change in output for each of 59 major industies. The results are in the form of intensity ratios and measure the effects on the Alberta economy in terms of GDP at basic prices, labour income, employment and gross production. The impacts on GDP, labour income and gross production are expressed as impacts per dollar of output change while employment impacts are expressed as the number of jobs per $10,000 of output (both in 2005 and 2008 dollars).

Example:

If there was a $1 million increase in the output of the construction industry (industry no. 230) in 2008, the effects would be as follows:

- GDP at basic prices would rise by 0.657 * $1,000,000 = $657,000.
- Total labour income would increase by 0.476 * $1,000,000 = $476,000.
- Employment would grow by $1,000,000/$10,000 * 0.061 = 6.2 jobs (based on the second column of employment intensity ratios).
- Gross Production would rise by 1.656 * $1,000,000 = $1,650,000.

TABLE 2: **OPEN MODEL**

Industry Multipliers

Table 2 consists of multipliers (direct and indirect) for industries. **To use these multipliers, the user must know the direct increase in GDP at basic prices, labour income, and person years of employment for which the economic impacts are being analyzed.**

- To use the GDP multiplier, the direct GDP content associated with some change in output must be known or calculated. The components of direct GDP are those items which make up a firm's operating surplus (wages, profits, depreciation, etc.). The GDP multiplier is applied to this value.

- To use the labour income multiplier, the direct increase in wages, supplementary labour income and net income of unincorporated business must be known or estimated. The labour income multiplier is then applied to this value.
- The employment multiplier is expressed in terms of total number of jobs of employment per direct job. For example, if a firm in construction (industry no. 230) was established and in 2008 employed 100 people directly, it would create of total of 100 * 1.842 = 184.2 jobs (i.e.100 direct jobs plus an additional 84.2 indirect jobs). Please note that the model cannot distinguish between full-time and part-time jobs.
- The gross production multiplier is expressed in terms of total gross production per dollar of direct production. For this multiplier, the direct production equals the total expenditure or output of the project.

It must be remembered that the change in output of a firm is not what constitutes its direct contribution for labour income, employment, or GDP. This means that the multipliers corresponding to these items are not applied to the change in output for an industry. The only exception is the multiplier for gross production (column 5) which is applied to this quantity.

TABLE 3: **OPEN MODEL**

Commodity Intensity Ratios – Producer Prices

Table 3 presents multipliers for the direct and indirect effects on the Alberta economy due to a change in expenditure (purchase) for each of 43 commodities. The results are in the form of intensity ratios and measure the effects on the Alberta economy in terms GDP at basic prices, labour income and employment.

The impacts on GDP and labour income are expressed as impacts per dollar of expenditure change while employment impacts are expressed as the number of jobs per $10,000 purchased (both in 2005 and 2008 dollars). Table 3 presents results calculated for data that is in producer prices.

Example:

If Alberta demand for Non-Metallic Mineral Products (commodity 25) increased by $10 million during 2008, the economic effects for GDP at basic prices and for labour income would as follows:

- GDP at basic prices would rise by 0.932 * $10,000,000 = $9,320,000.
- Total labour income would increase by 0.435 * $10,000,000 = $4,350,000.
- Employment multipliers are presented for commodities purchased at both 2005 and 2008 prices, and are used somewhat differently. The first column of employment multipliers is scaled in units of $10,000 purchased in 2005 dollars. The second column which expresses employment per $10,000 in 2008 dollars can be used to estimate employment impacts for production taking place in the year 2008. For this column, multipliers have been adjusted to reflect average price changes from 2005 to 2008. In this case, the calculation would be ($10,000,000/10,000) * 0.063 = 63.0 jobs.

TABLE 4: **OPEN MODEL**

Commodity Intensity Ratios –Purchaser Prices

Table 4 is analogous to Table 3 except that it presents results for data in purchaser prices.

TABLE 5: **CLOSED MODEL**

Industry Intensity Ratios

Table 5 is analogous to Table 1 except that it presents results for the closed model and includes induced impacts in addition to the direct and indirect effects.

TABLE 6: **CLOSED MODEL**

Industry Multipliers

Table 6 is analogous to Table 2 except that it presents results for the closed model and includes induced impacts in addition to the direct and indirect effects.

TABLE 7: **CLOSED MODEL**

Commodity Intensity Ratios at Producer Prices

Table 7 is analogous to Table 3 except that it presents results for the closed model and includes induced impacts in addition to the direct and indirect effects.

TABLE 8: **CLOSED MODEL**

Commodity Intensity Ratios at Purchaser Prices

Table 8 is analogous to Table 4 except that it presents results for the closed model and includes induced impacts in addition to the direct and indirect effects.

TABLE 9

Commodity Supply Ratios – Producer Prices

Table 9 shows the source of supply for commodities purchased in Alberta. The data is presented as a percent for Alberta, the rest of Canada, and the rest of world. This table indicates both the extent of “openness” of the Alberta economy and the degree to which the economy depends on imports. For example, 63.8 percent of forestry products (commodity 3) purchased in Alberta was supplied from Alberta domestic production, 35.8 percent was imported from the rest of Canada, and 0.4 percent was imported from outside Canada.

This example shows how multipliers and intensity ratios are used. Which you choose and how they are used is dependent upon the information you have available. For the purposes of this example, the results are presented for the open model only. The same calculations can be done using the appropriate closed model tables. For this example, the goal is to analyze which of two projects will provide a greater economic impact on the Alberta economy. The following information is given:

PROJECT 1

Construction of an establishment in the Wood Manufacturing Industries

The plant (establishment) will cost $4 million to build in 2008. A further $1 million will be spent purchasing machinery and equipment. When in operation in 2009, the plant will provide 15 jobs and generate annual sales of $3 million with the following distribution of costs (all data are in producer prices):

	($000's)
Wages	$ 600
Profits	425
Depreciation	340
Overhead	35
Materials	1,600
Total Output (Sales)	**$ 3,000**

PROJECT 2

Expansion of output by an establishment in the Wholesale Trade Industry

This project expands production by $3 million (in producer prices) in 2008 and 2009.

Analysis of Project 1

To analyze the impact of project 1, it is necessary to divide the project into two phases. The first phase occurs in 2008 and involves the effects of constructing the plant and purchasing the machinery and equipment. The second phase is the economic impacts of the yearly output of the plant beginning in 2009.

Construction Phase of Project 1

To measure the impact of the construction phase, refer to Table 3 which presents commodity intensity ratios. Since project 1 involves the construction of a plant to manufacture wood products, the appropriate intensity ratios are those for commodity 30 (non-residential construction). The commodity table is used because the activity would be completed in Alberta by contractors whose output (or commodity) is construction.

The construction phase during 2008 would have the following effects:

- GDP at basic prices would increase by 0.670 * $4,000,000 = $2,680,000.
- Labour income would increase by 0.489 * $4,000,000 = $1,956,000.
- Employment would rise by $4,000,000/$10,000 * 0.060 = 24.0 jobs (based on the column scaled in 2008 dollars).

The impacts of purchasing the machinery and equipment in 2008 are also estimated by using intensity ratios from Table 3, specifically the ratios for commodity 22 (machinery and equipment).

Since Alberta manufactures only a portion of the machinery or equipment it uses, it has a small impact on Alberta GDP (in this case only 27.7 percent of the machinery & equipment used in Alberta is produced in the province – see Table 9). The calculated impacts due to machinery and equipment purchases are as follows:

- GDP at basic prices would grow by 0.773 * $1,000,000 = $773,000.
- Labour income would rise by 0.371 * $1,000,000 = $371,000.
- Employment would increase by $1,000,000/$10,000 * 0.051 = 5.1 jobs (based on the column scaled in 2008 dollars).

Alberta clearly derives more economic benefit from the construction activity associated with Project 1 than it does from the purchase of machinery and equipment. This is due to the higher Alberta content for construction (i.e., local labour and materials) compared to machinery and equipment which is predominately produced outside the province.

Operations Phase of Project 1

The second phase of impacts associated with Project 1 involves the actual operation of the plant which would begin operations in 2009. For this phase the industry based tables are used since the impacts associated with the economic activity of a particular industry are being analyzed. Since both the value of direct output and a breakdown of inputs has been given, either industry intensity ratios (Table 1) or industry multipliers (Table 2) can be used. To use Table 1, the procedure is to locate the appropriate industry and apply the ratios to the value of output. Here, information for industry no. 321 (wood product industries) is used yielding the following impacts:

- GDP at basic prices would grow by 0.692 * $3,000,000 = $2,076,000.
- Labour Income would increase by 0.370 * $3,000,000 = $1,110,000.
- Employment for 2008 would increase by $3,000,000/$10,000 * 0.054 = 16.2 jobs (based the 2008 industry employment intensity ratio).

The effects of price increases should be accounted for when determining employment impacts beyond 2008 for which employment intensity ratios are provided in Table 1. For example, if industry selling prices for wood product manufactures (or some other suitable proxy for inflation) increased by 3 percent during 2009, the industry employment intensity ratio would be adjusted as follows:

- Estimated employment multiplier for 2009 = 0.054/1.03 = 0.052.

Using this revised employment multiplier, growth in employment for 2009 would be estimated at 3,000,000/10,000 * 0.052 = 15.6 jobs.

Since detailed cost information has been provided, the industry multipliers provided in Table 2 can also be used. The first step is to analyze the categories for which cost information has been provided and identify which of these enter into the establishment's operating surplus and thereby directly into GDP at basic prices.

As a rule, wages, profits and depreciation are primary inputs (not purchased from another industry) and go directly into GDP. If overhead consists of rent payments and salaries for administration (as is assumed in this case), this category also enters directly into GDP. Materials and other purchased inputs do not since they are purchased from other industries and involve indirect economic impacts.

Therefore, the cost categories can be allocated as follows:

Wages	$	600	Direct GDP
Profit		420	Direct GDP
Depreciation		340	Direct GDP
Overhead		35	Direct GDP
Subtotal		***1,400***	***Direct GDP***
Materials		1,600	Indirect GDP
Total Costs (Inputs)	***$***	***3,000***	***Gross Output***

Thus, $1,400,000 out of the firm's $3 million gross output (total costs) constitutes its direct contribution to GDP at basic prices.

Included in this contribution is an estimated $600 of direct labour income and 15 direct jobs to which the appropriate multipliers from Table 2 (industry no. 321, wood product manufacturing) would be applied. Based on Table 2, the indirect effects are:

- 1.735 * $1,400,000 = $2,429,400 of growth in GDP at basic prices.
- 1.750 * $600,000 = $1,050,000 of labour income.
- 1.905 * 15.0 direct jobs = 28.6 total jobs.

In this example, the results using multipliers from Table 2 are almost identical to those calculated using the intensity ratios from Table 1. In practice, the multipliers from Table 2 should be used in preference to the intensity ratios from Table 1. Intensity ratios assume an "average" direct contribution to labour income, GDP at basic prices, and employment, and these factors can vary substantially from industry averages for particular firms. Generally, a more accurate result can be obtained by using actual data for firms and industry multipliers rather than the industry averages implied in the intensity ratios.

Analysis of Project 2

The only information provided for project 2 is that output will increase by $3 million in both 2008 and 2009 for an establishment in the wholesale trade industry. Since only industry data has been given, one of the industry tables must be used (Table 1 or 2). As there is no breakdown of costs provided, direct GDP content associated with the change in output cannot be calculated. Therefore, industry intensity ratios from Table 1 rather than the multipliers from Table 2 must be used.

For Table 1 the wholesale trade industry is number 410. The $3 million change in the value of output is applied to each intensity ratio yielding the following total impacts:

- 0.844 * $3,000,000 = $2,532,000 growth in GDP at basic prices.
- 0.518 * $3,000,000 = $1,554,000 growth in labour income.
- $3,000,000/$10,000 * .083 = 24.9 jobs required.

Since the change in output of $3 million is the same for 2008 and 2009, the labour income and GDP impacts would be the same for both years.

To calculate the 2009 employment impact it is necessary to allow for price increases over 2008. For example, if the industry selling price (or another appropriate price proxy) for the wholesale trade industry increased by 3 percent in 2009, the employment multiplier (scaled in 2008 dollars) could be adjusted as follows:

- 0.083/1.03 = 0.081.

Therefore, the employment impact in 2009 would be:

- $3,000,000/$10,000 * 0.081 = 24.3 jobs.

Comparison of the Two Projects

The last step in the analysis is to compare the results of the two projects. The following is a summary of the results (note that for Project 1, we have to add the impacts of the construction and machinery and equipment purchases to get total impact for 2008):

	PROJECT	
	1	**2**
GDP at Basic prices ($000's)		
2008	3,453	2,532
2009	2,076	2,532
Labour Income (000's)		
2008	2,327	1,554
2009	1,110	1,554
Employment (Jobs)		
2008	29.1	24.9
2009	16.2	24.3

It is clear that project 1 has the larger economic impact for 2008. This result is largely due to the construction phase of the plant. If a longer term view is taken, then project 2 may in fact yield the larger economic benefit. This can be seen by comparing impacts for 2009 for which project 2 has a greater effect on GDP, labour income and employment.

It must be remembered that when the economy is in a phase of full employment, an increase in resources in one project may draw resources from other industries, reducing the overall impact.

TABLE 1: ALBERTA INDUSTRY INTENSITY RATIOS
(Open Model – Direct and Indirect Impacts)

Industry		GDP at Basic Prices	Labour Income	Employment 2005	Employment 2008	Gross Output
11A	Crop and animal production	0.784	0.269	0.108	0.098	2.078
113	Forestry and logging	0.695	0.363	0.055	0.052	1.856
114	Fishing, hunting and trapping	0.724	0.575	0.277	0.249	1.643
115	Support activities for agriculture and forestry	0.804	0.550	0.143	0.129	1.573
211	Oil and gas extraction	0.899	0.154	0.019	0.017	1.322
212	Mining (except oil and gas extraction)	0.839	0.315	0.039	0.035	1.392
213	Support activities for mining and oil and gas extraction	0.767	0.516	0.063	0.059	1.497
22A	Electric power generation, transmission and distribution	0.853	0.185	0.023	0.020	1.371
22B	Natural gas distribution, water, sewage and other systems	1.121	0.292	0.045	0.041	1.657
230	Construction	0.657	0.476	0.068	0.061	1.656
311	Food manufacturing	0.594	0.279	0.078	0.071	2.074
312	Beverage and tobacco product manufacturing	0.622	0.264	0.041	0.038	1.566
31A	Textile and textile product mills	0.600	0.416	0.093	0.084	1.397
315	Clothing manufacturing	0.592	0.510	0.129	0.117	1.282
316	Leather and allied product manufacturing	0.592	0.363	0.175	0.166	1.467
321	Wood product manufacturing	0.692	0.370	0.057	0.054	1.715
322	Paper manufacturing	0.560	0.307	0.040	0.039	1.624
323	Printing and related support activities	0.650	0.467	0.076	0.067	1.393
324	Petroleum and coal products manufacturing	0.828	0.168	0.022	0.020	2.160
325	Chemical manufacturing	0.725	0.229	0.033	0.030	2.127
326	Plastics and rubber products manufacturing	0.586	0.347	0.057	0.053	1.610
327	Non-metallic mineral product manufacturing	0.754	0.350	0.057	0.050	1.614
331	Primary metal manufacturing	0.276	0.170	0.026	0.023	1.352
332	Fabricated metal products manufacturing	0.580	0.379	0.057	0.052	1.332
333	Machinery manufacturing	0.563	0.334	0.048	0.046	1.376
334	Computer and electronic product manufacturing	0.367	0.262	0.037	0.034	1.293
335	Electrical equipment, appliance and component manufacturing	0.572	0.427	0.071	0.067	1.340
336	Transportation equipment manufacturing	0.487	0.374	0.056	0.047	1.313
337	Furniture and related product manufacturing	0.633	0.470	0.084	0.075	1.452
339	Miscellaneous manufacturing	0.674	0.405	0.099	0.089	1.361
410	Wholesale trade	0.844	0.518	0.092	0.083	1.528
4A0	Retail trade	0.850	0.622	0.191	0.179	1.536
484	Truck transportation	0.821	0.563	0.099	0.090	1.552
485	Transit and ground passenger transportation	1.015	0.717	0.165	0.146	1.648
486	Pipeline transportation	0.934	0.218	0.028	0.026	1.237
48A	Air, Rail, Water & Scenic & Sightseeing Transportation & Support Activities for Transportation	0.767	0.486	0.076	0.070	1.590
49A	Postal service and couriers and messengers	0.839	0.680	0.155	0.148	1.541
493	Warehousing and storage	0.904	0.669	0.115	0.107	1.278
512	Motion picture and sound recording industries	0.638	0.286	0.069	0.062	1.482
513	Broadcasting and telecommunications	0.837	0.310	0.047	0.045	1.301
51A	Publishing industries, information services and data processing services	0.819	0.467	0.081	0.073	1.382
5A0	Finance, insurance, real estate and rental and leasing	0.874	0.445	0.052	0.047	1.456
541	Professional, scientific and technical services	0.825	0.623	0.110	0.101	1.504
561	Administrative and support services	0.845	0.667	0.167	0.144	1.449
562	Waste management and remediation services	0.925	0.300	0.052	0.046	1.279
610	Educational services	0.930	0.769	0.267	0.246	1.348
620	Health care and social assistance	0.886	0.655	0.135	0.120	1.277
710	Arts, entertainment and recreation	0.771	0.542	0.244	0.214	1.705
720	Accommodation and food services	0.722	0.482	0.177	0.151	1.521
811	Repair and maintenance	0.869	0.586	0.165	0.145	1.456
813	Grant-making, civic, and professional and similar organizations	0.836	0.693	0.163	0.147	1.516
81A	Personal and laundry services and private households	0.856	0.633	0.304	0.273	1.333
NP1	Non-profit institutions serving households (excluding education)	0.848	0.712	0.180	0.155	1.460
NP2	Non-profit education services	0.866	0.751	0.167	0.143	1.328
GS1	Hospitals and government nursing and residential care facilities	0.817	0.707	0.135	0.123	1.334
GS2	Universities and government education services	0.918	0.810	0.135	0.125	1.250
GS4	Other municipal government services	0.877	0.582	0.097	0.080	1.401
GS5	Other provincial and territorial government services	0.785	0.571	0.106	0.095	1.849
GS6	Other federal government services	0.800	0.660	0.096	0.088	1.430

Notes: Intensity ratios for GDP, Labour Income and Gross Output expressed as total impact per dollar of output change
Intensity ratios for employment expressed as total number of jobs required per $10,000 of output change

TABLE 2: ALBERTA INDUSTRY MULTIPLIERS

(Open Model - Direct and Indirect Impacts)

Industry		GDP at Basic Prices	Labour Income	Employment 2005	Employment 2008	Gross Output
11A	Crop and animal production	2.333	3.318	1.801	1.805	2.078
113	Forestry and logging	1.586	1.643	1.853	1.829	1.856
114	Fishing, hunting and trapping	1.298	1.224	1.077	1.078	1.643
115	Support activities for agriculture and forestry	1.380	1.268	1.190	1.191	1.573
211	Oil and gas extraction	1.213	2.150	3.023	3.030	1.322
212	Mining (except oil and gas extraction)	1.279	1.409	1.665	1.663	1.392
213	Support activities for mining and oil and gas extraction	1.338	1.251	1.439	1.425	1.497
22A	Electric power generation, transmission and distribution	1.333	1.661	1.922	1.966	1.371
22B	Natural gas distribution, water, sewage and other systems	1.484	1.825	1.824	1.813	1.657
230	Construction	1.861	1.679	1.820	1.842	1.656
311	Food manufacturing	2.813	2.448	3.575	3.479	2.074
312	Beverage and tobacco product manufacturing	1.528	1.919	2.363	2.330	1.566
31A	Textile and textile product mills	1.382	1.263	1.212	1.213	1.397
315	Clothing manufacturing	1.251	1.163	1.133	1.134	1.282
316	Leather and allied product manufacturing	1.414	1.374	1.133	1.127	1.467
321	Wood product manufacturing	1.735	1.750	1.954	1.905	1.715
322	Paper manufacturing	1.903	1.699	2.214	2.054	1.624
323	Printing and related support activities	1.380	1.279	1.311	1.322	1.393
324	Petroleum and coal products manufacturing	12.790	7.697	9.486	8.859	2.160
325	Chemical manufacturing	3.981	3.469	4.746	4.592	2.127
326	Plastics and rubber products manufacturing	1.655	1.461	1.484	1.466	1.610
327	Non-metallic mineral product manufacturing	1.661	1.576	1.646	1.660	1.614
331	Primary metal manufacturing	2.043	1.823	2.058	2.068	1.352
332	Fabricated metal products manufacturing	1.335	1.291	1.350	1.346	1.332
333	Machinery manufacturing	1.401	1.383	1.475	1.443	1.376
334	Computer and electronic product manufacturing	1.618	1.525	1.795	1.760	1.293
335	Electrical equipment, appliance and component manufacturing	1.367	1.273	1.308	1.294	1.340
336	Transportation equipment manufacturing	1.391	1.292	1.380	1.421	1.313
337	Furniture and related product manufacturing	1.440	1.311	1.336	1.346	1.452
339	Miscellaneous manufacturing	1.292	1.269	1.193	1.194	1.361
410	Wholesale trade	1.389	1.352	1.405	1.405	1.528
4A0	Retail trade	1.399	1.283	1.163	1.156	1.536
484	Truck transportation	1.482	1.351	1.368	1.367	1.552
485	Transit and ground passenger transportation	1.430	1.281	1.240	1.245	1.648
486	Pipeline transportation	1.154	1.441	1.664	1.642	1.237
48A	Air, Rail, Water & Scenic & Sightseeing Transportation & Support Activities for Transportation	1.542	1.415	1.514	1.499	1.590
49A	Postal service and couriers and messengers	1.441	1.296	1.264	1.245	1.541
493	Warehousing and storage	1.152	1.116	1.128	1.123	1.278
512	Motion picture and sound recording industries	1.473	1.630	1.500	1.498	1.482
513	Broadcasting and telecommunications	1.199	1.351	1.491	1.453	1.301
51A	Publishing industries, information services and data processing services	1.286	1.292	1.328	1.331	1.382
5A0	Finance, insurance, real estate and rental and leasing	1.328	1.427	1.918	1.919	1.456
541	Professional, scientific and technical services	1.365	1.288	1.322	1.316	1.504
561	Administrative and support services	1.292	1.200	1.154	1.163	1.449
562	Waste management and remediation services	1.175	1.311	1.404	1.419	1.279
610	Educational services	1.264	1.138	1.071	1.068	1.348
620	Health care and social assistance	1.162	1.117	1.111	1.113	1.277
710	Arts, entertainment and recreation	1.586	1.474	1.211	1.217	1.705
720	Accommodation and food services	1.468	1.350	1.178	1.188	1.521
811	Repair and maintenance	1.318	1.242	1.159	1.164	1.456
813	Grant-making, civic, and professional and similar organizations	1.308	1.205	1.182	1.183	1.516
81A	Personal and laundry services and private households	1.211	1.152	1.060	1.060	1.333
NP1	Non-profit institutions serving households (excluding education)	1.325	1.169	1.131	1.136	1.460
NP2	Non-profit education services	1.202	1.084	1.071	1.074	1.328
GS1	Hospitals and government nursing and residential care facilities	1.181	1.126	1.140	1.136	1.334
GS2	Universities and government education services	1.140	1.089	1.119	1.113	1.250
GS4	Other municipal government services	1.278	1.221	1.276	1.307	1.401
GS5	Other provincial and territorial government services	2.665	2.658	3.125	3.108	1.849
GS6	Other federal government services	1.339	1.249	1.364	1.356	1.430

Notes: Multipliers for GDP expressed as total impact per direct change in GDP
Multipliers for Labour Income expressed as total impact per direct change in Labour Income
Multipliers for Gross Output expressed as total impact per direct change in Gross Output
Multipliers for Employment expressed as total jobs required per direct job required

You must know the direct change in GDP at basic prices, labour income or number of direct jobs required before using these multipliers.

TABLE 3: ALBERTA COMMODITY INTENSITY RATIOS IN PRODUCER PRICES
(Open Model – Direct and Indirect Impacts)

Commodity		GDP at Basic Prices	Labour Income	Employment 2005	Employment 2008	Gross Output
1	Grains	0.796	0.190	0.079	0.071	1.889
2	Other agricultural products	0.822	0.320	0.121	0.109	2.181
3	Forestry products	0.702	0.363	0.056	0.052	1.862
4	Fish and seafood and hunting and trapping products	0.973	0.554	0.238	0.214	2.056
5	Metal ores and concentrates	0.759	0.608	0.241	0.217	1.630
6	Mineral fuels	0.946	0.164	0.020	0.018	1.392
7	Non-metallic minerals	1.427	0.476	0.067	0.061	2.480
8	Services incidental to mining	0.767	0.515	0.063	0.058	1.497
9	Meat, fish and dairy products	0.964	0.482	0.149	0.135	3.757
10	Fruit, vegetable and other food products and feeds	0.990	0.415	0.088	0.081	2.531
11	Soft drinks and alcoholic beverages	0.875	0.482	0.149	0.129	2.007
12	Tobacco and tobacco products	0.000	0.000	0.000	0.000	0.000
13	Leather, rubber, and plastic products	0.877	0.491	0.082	0.076	2.443
14	Textile products	0.834	0.412	0.088	0.080	2.315
15	Hosiery, clothing and accessories	1.102	0.983	0.203	0.184	2.533
16	Lumber and wood products	1.044	0.565	0.090	0.085	2.560
17	Furniture, mattresses and lamps	0.917	0.706	0.123	0.109	2.141
18	Wood pulp, paper and paper products	0.604	0.333	0.045	0.043	1.728
19	Printing and publishing	0.835	0.501	0.089	0.081	1.608
20	Primary metal products	0.328	0.207	0.031	0.028	1.352
21	Fabricated metal products	0.598	0.388	0.059	0.054	1.407
22	Machinery	0.773	0.371	0.053	0.051	1.679
23	Motor vehicles, other transportation equipment and parts	0.619	0.454	0.070	0.060	1.598
24	Electrical, electronic and communication products	0.406	0.308	0.047	0.044	1.463
25	Non-metallic mineral products	0.932	0.435	0.071	0.063	1.996
26	Petroleum and coal products	1.242	0.238	0.031	0.028	2.690
27	Chemicals, pharmaceuticals and chemical products	0.813	0.255	0.038	0.034	2.376
28	Miscellaneous manufactured products	0.852	0.491	0.093	0.085	1.820
29	Residential building construction	0.630	0.438	0.069	0.063	1.630
30	Non-residential construction	0.670	0.489	0.067	0.060	1.718
31	Repair construction	0.703	0.544	0.082	0.075	1.446
32	Transportation and storage	0.872	0.506	0.089	0.081	1.568
33	Communications services	0.891	0.406	0.072	0.068	1.429
34	Other utilities	0.932	0.272	0.040	0.035	1.519
35	Wholesaling margins	0.833	0.510	0.090	0.081	1.529
36	Retailing margins and services	0.857	0.618	0.188	0.175	1.544
38	Finance, insurance, and real estate services	0.850	0.482	0.077	0.069	1.628
39	Business and computer services	0.862	0.606	0.110	0.100	1.552
40	Private education services	0.895	0.750	0.171	0.157	1.388
41	Health care and social assistance services	0.876	0.667	0.137	0.122	1.313
42	Accommodation services and meals	0.766	0.510	0.190	0.162	1.624
43	Miscellaneous services	0.890	0.583	0.173	0.153	1.637
47	Non-market services provided by non-profit institutions serving households	0.854	0.719	0.182	0.157	1.440
48	Non-market government sector services	0.837	0.666	0.116	0.105	1.507

Notes: Intensity ratios for GDP, Labour Income and Gross Output expressed as total impact per dollar of output change
Intensity ratios for employment expressed as total number of jobs required per $10,000 of output change

TABLE 4: ALBERTA COMMODITY INTENSITY RATIOS IN PURCHASER PRICES
(Open Model – Direct and Indirect Impacts)

Commodity		GDP at Basic Prices	Labour Income	Employment 2005	Employment 2008	Gross Output
1	Grains	0.796	0.190	0.079	0.071	1.889
2	Other agricultural products	0.781	0.304	0.115	0.103	2.073
3	Forestry products	0.698	0.362	0.056	0.052	1.853
4	Fish and seafood and hunting and trapping products	0.738	0.421	0.181	0.163	1.560
5	Metal ores and concentrates	0.759	0.608	0.241	0.217	1.630
6	Mineral fuels	0.899	0.155	0.019	0.018	1.323
7	Non-metallic minerals	0.832	0.278	0.039	0.036	1.447
8	Services incidental to mining	0.767	0.515	0.063	0.058	1.497
9	Meat, fish and dairy products	0.572	0.286	0.088	0.080	2.230
10	Fruit, vegetable and other food products and feeds	0.650	0.272	0.058	0.053	1.662
11	Soft drinks and alcoholic beverages	0.680	0.375	0.116	0.100	1.559
13	Leather, rubber, and plastic products	0.594	0.332	0.055	0.052	1.654
14	Textile products	0.661	0.327	0.070	0.063	1.835
15	Hosiery, clothing and accessories	0.577	0.514	0.106	0.096	1.326
16	Lumber and wood products	0.695	0.376	0.060	0.057	1.705
17	Furniture, mattresses and lamps	0.619	0.477	0.083	0.074	1.446
18	Wood pulp, paper and paper products	0.570	0.314	0.042	0.041	1.630
19	Printing and publishing	0.723	0.433	0.077	0.070	1.392
20	Primary metal products	0.328	0.207	0.031	0.028	1.352
21	Fabricated metal products	0.572	0.372	0.056	0.052	1.346
22	Machinery	0.631	0.303	0.043	0.041	1.371
23	Motor vehicles, other transportation equipment and parts	0.522	0.383	0.059	0.051	1.348
24	Electrical, electronic and communication products	0.359	0.272	0.041	0.039	1.293
25	Non-metallic mineral products	0.753	0.351	0.057	0.051	1.611
26	Petroleum and coal products	0.855	0.164	0.021	0.019	1.851
27	Chemicals, pharmaceuticals and chemical products	0.728	0.229	0.034	0.031	2.129
28	Miscellaneous manufactured products	0.668	0.385	0.073	0.067	1.427
29	Residential building construction	0.593	0.413	0.065	0.059	1.535
30	Non-residential construction	0.667	0.487	0.067	0.060	1.712
31	Repair construction	0.703	0.544	0.082	0.075	1.446
32	Transportation and storage	0.838	0.486	0.085	0.078	1.506
33	Communications services	0.838	0.382	0.067	0.064	1.344
34	Other utilities	0.892	0.261	0.038	0.033	1.454
35	Wholesaling margins	0.833	0.510	0.090	0.081	1.529
36	Retailing margins and services	0.849	0.613	0.186	0.173	1.530
38	Finance, insurance, and real estate services	0.836	0.474	0.076	0.068	1.600
39	Business and computer services	0.827	0.582	0.105	0.096	1.489
40	Private education services	0.883	0.739	0.169	0.155	1.369
41	Health care and social assistance services	0.876	0.667	0.137	0.122	1.313
42	Accommodation services and meals	0.722	0.481	0.179	0.153	1.532
43	Miscellaneous services	0.821	0.538	0.160	0.141	1.511
47	Non-market services provided by non-profit institutions serving households	0.854	0.719	0.182	0.157	1.440
48	Non-market government sector services	0.837	0.666	0.116	0.105	1.507

Notes: Intensity ratios for GDP, Labour Income and Gross Output expressed as total impact per dollar of output change
Intensity ratios for employment expressed as total number of jobs required per $10,000 of output change

TABLE 5: ALBERTA INDUSTRY INTENSITY RATIOS

(Closed Model – Direct, Indirect and Induced Impacts)

Industry		GDP at Basic Prices	Labour Income	Employment 2005	Employment 2008	Gross Output
11A	Crop and animal production	0.953	0.365	0.129	0.117	2.372
113	Forestry and logging	0.901	0.480	0.081	0.075	2.215
114	Fishing, hunting and trapping	1.112	0.796	0.326	0.293	2.318
115	Support activities for agriculture and forestry	1.129	0.735	0.184	0.166	2.140
211	Oil and gas extraction	0.981	0.201	0.030	0.027	1.464
212	Mining (except oil and gas extraction)	1.016	0.416	0.061	0.055	1.700
213	Support activities for mining and oil and gas extraction	1.043	0.673	0.098	0.090	1.978
22A	Electric power generation, transmission and distribution	0.952	0.241	0.035	0.031	1.543
22B	Natural gas distribution, water, sewage and other systems	1.280	0.382	0.065	0.059	1.933
230	Construction	0.973	0.656	0.107	0.097	2.206
311	Food manufacturing	0.751	0.368	0.098	0.089	2.348
312	Beverage and tobacco product manufacturing	0.764	0.345	0.059	0.054	1.814
31A	Textile and textile product mills	0.843	0.554	0.123	0.111	1.821
315	Clothing manufacturing	0.895	0.682	0.167	0.151	1.809
316	Leather and allied product manufacturing	0.816	0.490	0.203	0.191	1.855
321	Wood product manufacturing	0.900	0.489	0.084	0.078	2.078
322	Paper manufacturing	0.729	0.403	0.061	0.058	1.917
323	Printing and related support activities	0.905	0.612	0.108	0.096	1.837
324	Petroleum and coal products manufacturing	0.920	0.221	0.034	0.030	2.321
325	Chemical manufacturing	0.848	0.299	0.048	0.043	2.341
326	Plastics and rubber products manufacturing	0.777	0.455	0.081	0.075	1.943
327	Non-metallic mineral product manufacturing	0.948	0.460	0.081	0.072	1.952
331	Primary metal manufacturing	0.373	0.225	0.038	0.034	1.521
332	Fabricated metal products manufacturing	0.790	0.499	0.083	0.076	1.697
333	Machinery manufacturing	0.751	0.441	0.071	0.068	1.704
334	Computer and electronic product manufacturing	0.516	0.346	0.055	0.051	1.551
335	Electrical equipment, appliance and component manufacturing	0.813	0.564	0.102	0.094	1.759
336	Transportation equipment manufacturing	0.693	0.491	0.082	0.070	1.671
337	Furniture and related product manufacturing	0.897	0.620	0.117	0.105	1.912
339	Miscellaneous manufacturing	0.911	0.540	0.129	0.116	1.773
410	Wholesale trade	1.126	0.679	0.128	0.115	2.020
4A0	Retail trade	1.222	0.833	0.238	0.221	2.185
484	Truck transportation	1.153	0.751	0.140	0.127	2.129
485	Transit and ground passenger transportation	1.443	0.960	0.218	0.195	2.393
486	Pipeline transportation	1.053	0.286	0.043	0.039	1.445
48A	Air, Rail, Water & Scenic & Sightseeing Transportation & Support Activities for Transportation	1.038	0.640	0.110	0.101	2.061
49A	Postal service and couriers and messengers	1.238	0.906	0.206	0.193	2.235
493	Warehousing and storage	1.282	0.883	0.163	0.149	1.936
512	Motion picture and sound recording industries	0.810	0.383	0.091	0.082	1.782
513	Broadcasting and telecommunications	1.011	0.408	0.069	0.065	1.603
51A	Publishing industries, information services and data processing services	1.078	0.614	0.114	0.103	1.833
5A0	Finance, insurance, real estate and rental and leasing	1.136	0.593	0.085	0.076	1.910
541	Professional, scientific and technical services	1.172	0.820	0.153	0.140	2.107
561	Administrative and support services	1.229	0.884	0.215	0.187	2.116
562	Waste management and remediation services	1.092	0.395	0.073	0.065	1.570
610	Educational services	1.436	1.056	0.330	0.303	2.228
620	Health care and social assistance	1.281	0.880	0.185	0.165	1.965
710	Arts, entertainment and recreation	1.114	0.737	0.287	0.252	2.303
720	Accommodation and food services	1.013	0.647	0.214	0.184	2.027
811	Repair and maintenance	1.212	0.780	0.208	0.183	2.053
813	Grant-making, civic, and professional and similar organizations	1.231	0.918	0.213	0.191	2.204
81A	Personal and laundry services and private households	1.265	0.866	0.355	0.319	2.045
NP1	Non-profit institutions serving households (excluding education)	1.285	0.960	0.234	0.204	2.221
NP2	Non-profit education services	1.294	0.994	0.220	0.191	2.073
GS1	Hospitals and government nursing and residential care facilities	1.219	0.935	0.185	0.168	2.032
GS2	Universities and government education services	1.379	1.072	0.193	0.177	2.052
GS4	Other municipal government services	1.210	0.771	0.139	0.117	1.980
GS5	Other provincial and territorial government services	1.102	0.751	0.146	0.131	2.400
GS6	Other federal government services	1.167	0.869	0.142	0.129	2.070

Notes: Intensity ratios for GDP, Labour Income and Gross Output expressed as total impact per dollar of output change
Intensity ratios for employment expressed as total number of jobs required per $10,000 of output change

TABLE 6: ALBERTA INDUSTRY MULTIPLIERS

(Closed Model – Direct, Indirect and Induced Impacts)

Industry		GDP at Basic Prices	Labour Income	Employment 2005	Employment 2008	Gross Output
11A	Crop and animal production	2.836	4.499	2.154	2.156	2.372
113	Forestry and logging	2.055	2.172	2.722	2.650	2.215
114	Fishing, hunting and trapping	1.994	1.692	1.266	1.267	2.318
115	Support activities for agriculture and forestry	1.940	1.694	1.530	1.529	2.140
211	Oil and gas extraction	1.323	2.794	4.625	4.617	1.464
212	Mining (except oil and gas extraction)	1.548	1.858	2.616	2.599	1.700
213	Support activities for mining and oil and gas extraction	1.821	1.631	2.230	2.182	1.978
22A	Electric power generation, transmission and distribution	1.487	2.164	2.960	3.045	1.543
22B	Natural gas distribution, water, sewage and other systems	1.695	2.390	2.632	2.602	1.933
230	Construction	2.757	2.311	2.887	2.916	2.206
311	Food manufacturing	3.558	3.232	4.479	4.343	2.348
312	Beverage and tobacco product manufacturing	1.877	2.506	3.390	3.315	1.814
31A	Textile and textile product mills	1.943	1.683	1.611	1.611	1.821
315	Clothing manufacturing	1.890	1.555	1.466	1.466	1.809
316	Leather and allied product manufacturing	1.947	1.854	1.314	1.298	1.855
321	Wood product manufacturing	2.257	2.309	2.843	2.728	2.078
322	Paper manufacturing	2.475	2.228	3.384	3.059	1.917
323	Printing and related support activities	1.922	1.676	1.864	1.889	1.837
324	Petroleum and coal products manufacturing	14.221	10.101	14.518	13.475	2.321
325	Chemical manufacturing	4.654	4.522	6.990	6.731	2.341
326	Plastics and rubber products manufacturing	2.196	1.920	2.107	2.056	1.943
327	Non-metallic mineral product manufacturing	2.089	2.074	2.352	2.381	1.952
331	Primary metal manufacturing	2.759	2.411	3.031	3.038	1.521
332	Fabricated metal products manufacturing	1.818	1.697	1.973	1.953	1.697
333	Machinery manufacturing	1.870	1.825	2.205	2.102	1.704
334	Computer and electronic product manufacturing	2.272	2.015	2.704	2.623	1.551
335	Electrical equipment, appliance and component manufacturing	1.943	1.682	1.862	1.815	1.759
336	Transportation equipment manufacturing	1.980	1.696	2.012	2.120	1.671
337	Furniture and related product manufacturing	2.041	1.729	1.861	1.879	1.912
339	Miscellaneous manufacturing	1.746	1.690	1.550	1.550	1.773
410	Wholesale trade	1.855	1.771	1.947	1.944	2.020
4A0	Retail trade	2.012	1.719	1.447	1.427	2.185
484	Truck transportation	2.080	1.803	1.944	1.936	2.129
485	Transit and ground passenger transportation	2.033	1.715	1.645	1.654	2.393
486	Pipeline transportation	1.301	1.889	2.549	2.496	1.445
48A	Air, Rail, Water & Scenic & Sightseeing Transportation & Support Activities for Transportation	2.087	1.863	2.187	2.148	2.061
49A	Postal service and couriers and messengers	2.127	1.727	1.671	1.622	2.235
493	Warehousing and storage	1.634	1.475	1.592	1.570	1.936
512	Motion picture and sound recording industries	1.871	2.189	1.970	1.966	1.782
513	Broadcasting and telecommunications	1.448	1.781	2.177	2.080	1.603
51A	Publishing industries, information services and data processing services	1.694	1.700	1.859	1.860	1.833
5A0	Finance, insurance, real estate and rental and leasing	1.724	1.903	3.123	3.118	1.910
541	Professional, scientific and technical services	1.938	1.694	1.844	1.824	2.107
561	Administrative and support services	1.879	1.591	1.486	1.511	2.116
562	Waste management and remediation services	1.387	1.725	1.969	2.000	1.570
610	Educational services	1.952	1.563	1.326	1.315	2.228
620	Health care and social assistance	1.681	1.499	1.518	1.524	1.965
710	Arts, entertainment and recreation	2.293	2.005	1.425	1.437	2.303
720	Accommodation and food services	2.059	1.812	1.420	1.445	2.027
811	Repair and maintenance	1.839	1.655	1.461	1.474	2.053
813	Grant-making, civic, and professional and similar organizations	1.926	1.595	1.541	1.541	2.204
81A	Personal and laundry services and private households	1.790	1.575	1.239	1.239	2.045
NP1	Non-profit institutions serving households (excluding education)	2.008	1.577	1.476	1.497	2.221
NP2	Non-profit education services	1.797	1.435	1.417	1.437	2.073
GS1	Hospitals and government nursing and residential care facilities	1.762	1.490	1.567	1.553	2.032
GS2	Universities and government education services	1.712	1.441	1.599	1.576	2.052
GS4	Other municipal government services	1.763	1.618	1.824	1.923	1.980
GS5	Other provincial and territorial government services	3.742	3.495	4.294	4.273	2.400
GS6	Other federal government services	1.955	1.643	2.023	1.994	2.070

Notes: Multipliers for GDP expressed as total impact per direct change in GDP
Multipliers for Labour Income expressed as total impact per direct change in Labour Income
Multipliers for Gross Output expressed as total impact per direct change in Gross Output
Multipliers for Employment expressed as total jobs required per direct job required

You must know the direct change in GDP at basic prices, labour income or number of direct jobs required before using these multipliers.

TABLE 7: ALBERTA COMMODITY INTENSITY RATIOS IN PRODUCER PRICES

(Closed Model – Direct, Indirect and Induced Impacts)

Commodity		GDP at Basic Prices	Labour Income	Employment 2005	Employment 2008	Gross Output
1	Grains	0.896	0.246	0.091	0.082	2.063
2	Other agricultural products	1.024	0.435	0.146	0.132	2.533
3	Forestry products	0.908	0.480	0.082	0.075	2.220
4	Fish and seafood and hunting and trapping products	1.336	0.760	0.284	0.255	2.688
5	Metal ores and concentrates	1.168	0.840	0.292	0.263	2.342
6	Mineral fuels	1.032	0.213	0.031	0.028	1.542
7	Non-metallic minerals	1.691	0.626	0.100	0.091	2.940
8	Services incidental to mining	1.043	0.672	0.098	0.090	1.978
9	Meat, fish and dairy products	1.237	0.637	0.183	0.166	4.233
10	Fruit, vegetable and other food products and feeds	1.223	0.547	0.117	0.107	2.936
11	Soft drinks and alcoholic beverages	1.157	0.642	0.184	0.161	2.498
13	Leather, rubber, and plastic products	1.148	0.645	0.116	0.107	2.914
14	Textile products	1.067	0.545	0.117	0.106	2.721
15	Hosiery, clothing and accessories	1.679	1.310	0.276	0.248	3.537
16	Lumber and wood products	1.362	0.745	0.130	0.121	3.114
17	Furniture, mattresses and lamps	1.310	0.929	0.172	0.154	2.826
18	Wood pulp, paper and paper products	0.788	0.437	0.068	0.064	2.047
19	Printing and publishing	1.114	0.659	0.124	0.112	2.094
20	Primary metal products	0.444	0.273	0.045	0.041	1.554
21	Fabricated metal products	0.813	0.511	0.086	0.078	1.781
22	Machinery	0.980	0.488	0.079	0.074	2.039
23	Motor vehicles, other transportation equipment and parts	0.869	0.596	0.102	0.088	2.034
24	Electrical, electronic and communication products	0.581	0.408	0.069	0.063	1.768
25	Non-metallic mineral products	1.174	0.572	0.101	0.090	2.417
26	Petroleum and coal products	1.371	0.312	0.047	0.043	2.915
27	Chemicals, pharmaceuticals and chemical products	0.950	0.333	0.055	0.050	2.615
28	Miscellaneous manufactured products	1.131	0.649	0.128	0.116	2.305
29	Residential building construction	0.925	0.606	0.106	0.096	2.143
30	Non-residential construction	0.999	0.676	0.109	0.097	2.291
31	Repair construction	1.006	0.716	0.121	0.109	1.973
32	Transportation and storage	1.164	0.672	0.126	0.114	2.076
33	Communications services	1.122	0.537	0.101	0.094	1.830
34	Other utilities	1.082	0.357	0.059	0.051	1.779
35	Wholesaling margins	1.111	0.668	0.125	0.113	2.013
36	Retailing margins and services	1.226	0.828	0.234	0.216	2.186
38	Finance, insurance, and real estate services	1.117	0.633	0.111	0.099	2.093
39	Business and computer services	1.200	0.798	0.152	0.138	2.140
40	Private education services	1.338	1.001	0.227	0.207	2.159
41	Health care and social assistance services	1.272	0.892	0.187	0.166	2.002
42	Accommodation services and meals	1.074	0.685	0.228	0.197	2.161
43	Miscellaneous services	1.234	0.778	0.216	0.192	2.235
47	Non-market services provided by non-profit institutions serving households	1.304	0.974	0.239	0.208	2.224
48	Non-market government sector services	1.213	0.879	0.163	0.147	2.161

Notes: Intensity ratios for GDP, Labour Income and Gross Output expressed as total impact per dollar of output change
Intensity ratios for employment expressed as total number of jobs required per $10,000 of output change

TABLE 8: ALBERTA COMMODITY INTENSITY RATIOS IN PURCHASER PRICES
(Closed Model – Direct, Indirect and Induced Impacts)

Commodity		GDP at Basic Prices	Labour Income	Employment 2005	Employment 2008	Gross Output
1	Grains	0.896	0.246	0.091	0.082	2.063
2	Other agricultural products	0.973	0.413	0.139	0.125	2.407
3	Forestry products	0.903	0.478	0.081	0.075	2.210
4	Fish and seafood and hunting and trapping products	1.014	0.577	0.215	0.194	2.039
5	Metal ores and concentrates	1.168	0.840	0.292	0.263	2.342
6	Mineral fuels	0.981	0.202	0.030	0.027	1.465
7	Non-metallic minerals	0.987	0.365	0.059	0.053	1.715
8	Services incidental to mining	1.043	0.672	0.098	0.090	1.978
9	Meat, fish and dairy products	0.734	0.378	0.109	0.099	2.512
10	Fruit, vegetable and other food products and feeds	0.803	0.359	0.077	0.070	1.928
11	Soft drinks and alcoholic beverages	0.899	0.499	0.143	0.125	1.940
13	Leather, rubber, and plastic products	0.777	0.437	0.079	0.072	1.974
14	Textile products	0.846	0.432	0.093	0.084	2.157
15	Hosiery, clothing and accessories	0.879	0.686	0.144	0.130	1.851
16	Lumber and wood products	0.907	0.496	0.087	0.080	2.074
17	Furniture, mattresses and lamps	0.885	0.628	0.116	0.104	1.909
18	Wood pulp, paper and paper products	0.743	0.412	0.064	0.060	1.931
19	Printing and publishing	0.964	0.571	0.107	0.097	1.813
20	Primary metal products	0.444	0.273	0.045	0.041	1.554
21	Fabricated metal products	0.778	0.488	0.082	0.075	1.704
22	Machinery	0.800	0.399	0.064	0.060	1.665
23	Motor vehicles, other transportation equipment and parts	0.733	0.502	0.086	0.074	1.715
24	Electrical, electronic and communication products	0.514	0.360	0.061	0.056	1.563
25	Non-metallic mineral products	0.948	0.462	0.082	0.073	1.951
26	Petroleum and coal products	0.944	0.214	0.032	0.029	2.005
27	Chemicals, pharmaceuticals and chemical products	0.851	0.298	0.049	0.045	2.342
28	Miscellaneous manufactured products	0.887	0.509	0.101	0.091	1.808
29	Residential building construction	0.871	0.571	0.100	0.091	2.019
30	Non-residential construction	0.996	0.674	0.108	0.097	2.284
31	Repair construction	1.006	0.716	0.121	0.109	1.973
32	Transportation and storage	1.119	0.646	0.121	0.109	1.995
33	Communications services	1.055	0.505	0.095	0.089	1.722
34	Other utilities	1.036	0.342	0.056	0.049	1.703
35	Wholesaling margins	1.111	0.668	0.125	0.113	2.013
36	Retailing margins and services	1.215	0.820	0.232	0.214	2.167
38	Finance, insurance, and real estate services	1.098	0.623	0.109	0.098	2.057
39	Business and computer services	1.151	0.766	0.146	0.132	2.053
40	Private education services	1.320	0.987	0.224	0.204	2.130
41	Health care and social assistance services	1.272	0.892	0.187	0.166	2.002
42	Accommodation services and meals	1.014	0.647	0.216	0.186	2.039
43	Miscellaneous services	1.139	0.718	0.199	0.177	2.063
47	Non-market services provided by non-profit institutions serving households	1.304	0.974	0.239	0.208	2.224
48	Non-market government sector services	1.213	0.879	0.163	0.147	2.161

Notes: Intensity ratios for GDP, Labour Income and Gross Output expressed as total impact per dollar of output change
Intensity ratios for employment expressed as total number of jobs required per $10,000 of output change

TABLE 9: ALBERTA COMMODITY SUPPLY RATIOS

(Percent)

Commodity		Alberta	Rest of Canada	Rest of World	Total Supply
1	Grains	88.7	7.7	3.6	100.0
2	Other agricultural products	72.7	23.8	3.5	100.0
3	Forestry products	63.8	35.8	0.4	100.0
4	Fish, seafood and trapping products	8.5	48.7	42.8	100.0
5	Metal ores & concentrates	0.3	0.0	99.7	100.0
6	Mineral fuels	87.6	12.3	0.1	100.0
7	Non-metallic minerals	54.9	23.0	22.1	100.0
8	Services incidental to mining	97.1	2.8	0.1	100.0
9	Meat, fish, and dairy products	43.2	53.6	3.2	100.0
10	Fruit, veg. and other food products, feeds	24.1	47.0	28.9	100.0
11	Soft drinks and alcoholic beverages	59.5	19.3	21.2	100.0
12	Tobacco and tobacco products	0.0	84.8	15.2	100.0
13	Leather, rubber, and plastic products	24.0	26.5	49.5	100.0
14	Textile products	12.1	30.3	57.6	100.0
15	Hosiery, clothing and accessories	1.5	11.0	87.5	100.0
16	Lumber and wood products	47.4	47.2	5.4	100.0
17	Furniture and fixtures	25.0	41.7	33.3	100.0
18	Wood pulp, paper and paper products	19.5	48.9	31.6	100.0
19	Printing and publishing	50.2	27.6	22.2	100.0
20	Primary metal products	26.9	22.8	50.3	100.0
21	Other metal products	35.8	22.0	42.2	100.0
22	Machinery and equipment	27.7	5.7	66.6	100.0
23	Motor veh., oth. transport equip. and parts	2.9	18.0	79.1	100.0
24	Electrical, electronic and communic. prod.	3.2	11.0	85.8	100.0
25	Non-metallic mineral products	58.4	13.6	28.0	100.0
26	Petroleum and coal products	82.8	8.3	8.9	100.0
27	Chemicals, pharmaceuticals & chemical prod.	51.5	15.6	32.9	100.0
28	Other manufactured products	18.3	17.4	64.3	100.0
29	Residential construction	100.0	0.0	0.0	100.0
30	Non-residential construction	100.0	0.0	0.0	100.0
31	Repair construction	100.0	0.0	0.0	100.0
32	Transportation and storage	79.2	17.7	3.1	100.0
33	Communications services	67.5	25.1	7.4	100.0
34	Other utilities	95.3	2.9	1.8	100.0
35	Wholesaling margins	74.4	25.3	0.3	100.0
36	Retailing margins	94.5	5.5	0.0	100.0
38	Other finance, insurance, and real estate services	80.4	15.5	4.1	100.0
39	Business and computer services	73.9	18.7	7.4	100.0
40	Private education services	90.6	4.8	4.6	100.0
41	Health and social services	98.8	0.8	0.4	100.0
42	Accommodation services and meals	95.2	3.0	1.8	100.0
43	Other services	87.3	8.6	4.1	100.0
44	Transportation margins	64.2	35.8	0.0	100.0

APPENDIX 1

Industry Aggregation Parameters

Industry	Worksheet Level Number	Link Level Number
11A Crop & Animal Production	111400-112A00	111, 112
113 Forestry & Logging	113000	113
114 Fishing, Hunting & Trapping	114000	114
115 Support Activities for Agriculture & Forestry	115100-115300	115
211 Oil & Gas Extraction	211100	2111
212 Mining (Except Oil & Gas Extraction)	212100-21239A	2121, 2122, 2123
213 Support Activities for Mining & Oil & Gas Extraction	213100	2131
22A Electric Power Generation, Transmission & Dist'n	221100	2211
22B Natural Gas Dist'n, Water, Sewage & Other Systems	221200-221300	2212, 2213
230 Construction	2300A0-2300I0	23
311 Food Manufacturing	311100-3119A0	311
312 Beverage & Tobacco Products Manufacturing	312110-312200	312
31A Textile, 315 Clothing & 316 Leather Industries	313100-316900	313, 314, 315, 316
321 Wood Product Manufacturing	321100-321990	321
322 Paper Manufacturing	322110-322290	322
323 Printing & Related Support Activities	323110-323120	323
324 Petroleum & Coal Products Manufacturing	324110-324190	324
325 Chemical Manufacturing	325110-325900	325
326 Plastics & Rubber Products Manufacturing	326110-326290	326
327 Non-Metallic Mineral Products Manufacturing	327310-327900	327
331 Primary Metal Manufacturing	331100-331520	331
332 Fabricated Metal Products Manufacturing	332100-332900	332
333 Machinery Manufacturing & 336 Transportation Equip.	333110-333990, 336110-336900	333, 336
334 Computer & Electronic Products Manufacturing	334100-334600	334
335 Electrical Equip., Appliance & Component Manufacturing	335200-3359A0	335
337 Furniture & Related Products Manufacturing	337110-337900	337
339 Miscellaneous Manufacturing	339100-339990	339
410 Wholesale Trade	410000	41
4A0 Retail Trade	4A0000	44-45
484 Truck Transportation	484000	484
485 Transit & Ground Passenger Transportation	485100-485A00	485
486 Pipeline Transportation	486200-486A00	486
48A Air, Rail, Water & Scenic & Sightseeing Transportation	481000-483000, 487000-488000	481-483, 487, 488
49A Postal Service and Couriers & Messengers	491000-492000	491, 492
493 Warehousing & Storage	493130-4931A0	493
512 Motion Picture & Sound Recording Industries	512130-5122200	512
513 Broadcasting & Telecommunications	513100-513300	513
51A Publishing Industries, Information Services & Data Processing	511100-511200, 514100-514200	511, 514
5A0 Finance, Insurance, Real Estate and Renting & Leasing	5A0110-5A0650	521-523, 526, 531-533
541 Professional, Scientific & Technical Services	541300-541B00	541
561 Administrative & Support Services	561500-561A00	561
562 Waste Management & Remediation Services	562000	562
610 Educational Services	611100-611B00	611
620 Health Care & Social Assistance	621110-624000	621, 623, 624
710 Arts, Entertainment & Recreation	711000-713A00	71
720 Accommodation & Food Services	721100-722000	72
811 Repair & Maintenance	811110-811A00	811
813 Grant Making, Civic & Professional & Similar Orgs.	813A00	8132-8134, 8139
81A Personal & Laundry Services & Private Households	812200-814000	812, 814
NP1 Non-Profit Institutions Serving Households (Excl. Education)	NP1100-NP1900	Fictive
NP2 Non-Profit Education Institutions	NP2000	Fictive
GS1 Hospitals & Residential Care Facilities	GS1100-GS1200	622
GS2 Education	GS2100-GS2230	6113
GS4 Other Municipal Government Services	GS4000	Fictive
GS5 Other Provincial Government Services	GS5000	Fictive
GS6 Other Federal Government Services	GS3000, GS6000	Fictive

APPENDIX 2

Industry Codes at the Worksheet Level (W) in terms of 1997 NAICS

Code	Industry Title - W	1997 NAICS
111400	Greenhouse, Nursery and Floriculture Production	1114
111A00	Crop Production (except Greenhouse, Nursery and Floriculture Production)	1111-1113, 1119
112500	Animal Aquaculture	1125
112A00	Animal Production (except Animal Aquaculture)	1121-1124, 1129
113000	Forestry and Logging	113
114000	Fishing, Hunting and Trapping	114
115100	Support Activities for Crop Production	1151
115200	Support Activities for Animal Production	1152
115300	Support Activities for Forestry	1153
211100	Oil and Gas extraction	2111
212100	Coal Mining	2121
212210	Iron Ore Mining	21221
212220	Gold and Silver Ore Mining	21222
212230	Copper, Nickel, Lead and Zinc Ore Mining	21223
212290	Other Metal Ore Mining	21229
212310	Stone Mining and Quarrying	21231
212320	Sand, Gravel, Clay, & Ceramic & Refractory Minerals Mining & Quarrying	21232
212393	Salt Mining	212392
212394	Asbestos Mining	212393
212396	Potash Mining	212394
21239A	Miscellaneous Non-Metallic Mineral Mining and Quarrying	212396
213100	Support Activities for Mining and Oil and Gas Extraction	2131
221100	Electric Power Generation, Transmission and Distribution	2211
221200	Natural Gas Distribution	2212
221300	Water, Sewage and Other Systems	2213
2300A0	Residential Building Construction	231210
2300B0	Non-residential Building Construction	231220
2300C0	Transportation Engineering Construction	231310
2300D0	Oil and Gas Engineering Construction	231330
2300E0	Electric Power Engineering Construction	23
2300F0	Communication Engineering Construction	23
2300G0	Other Engineering Construction	23
2300H0	Repair Construction	23
2300I0	Other Activities of the Construction Industry	23
311100	Animal Food Manufacturing	3111
311210	Flour Milling and Malt Manufacturing	31121
311220	Starch and Vegetable Fat and Oil Manufacturing	31122
311230	Breakfast Cereal Manufacturing	31123
311310	Sugar Manufacturing	31131
3113A0	Confectionery Product Manufacturing	31131
311410	Frozen Food Manufacturing	31141
311420	Fruit and Vegetable Canning, Pickling and Drying	31142
311500	Dairy Product Manufacturing	3115
311611	Animal (except Poultry) Slaughtering	311611
311614	Rendering and Meat Processing from Carcasses	311614
311615	Poultry Processing	311615
311700	Seafood Product Preparation and Packaging	3117
311810	Bread and Bakery Product Manufacturing	31181
311821	Cookie and Cracker Manufacturing	311821
311822	Flour Mixes and Dough Manufacturing from Purchased Flour	311822
31182A	Dry Pasta and Tortilla Manufacturing	311823, 31183
311910	Snack Food Manufacturing	31191
311920	Coffee and Tea Manufacturing	31192

Code	Industry Title - W	1997 NAICS
3119A0	Other Miscellaneous Food Manufacturing	31193, 31194, 3119
312110	Soft Drink and Ice Manufacturing	31211
312120	Breweries	31212
312130	Wineries	31213
312140	Distilleries	31214
312200	Tobacco Manufacturing	3122
313100	Fibre, Yarn and Thread Mills	3131
313200	Fabric Mills	3132
313300	Textile and Fabric Finishing and Fabric Coating	3133
314110	Carpet and Rug Mills	31411
314120	Curtain and Linen Mills	31412
314910	Textile Bag and Canvas Mills	31491
314990	All Other Textile Product Mills	31499
315110	Hosiery and Sock Mills	31511
315190	Other Clothing Knitting Mills	31519
315210	Cut and Sew Clothing Contracting	31521
315220	Men's and Boys' Cut and Sew Clothing Manufacturing	31522
315230	Women's and Girls' Cut and Sew Clothing Manufacturing	31523
315290	Other Cut and Sew Clothing Manufacturing	31529
315900	Clothing Accessories and Other Clothing Manufacturing	3159
316100	Leather and Hide Tanning and Finishing	3161
316200	Footwear Manufacturing	3162
316900	Other Leather and Allied Product Manufacturing	3169
321100	Sawmills and Wood Preservation	3211
321215	Structural Wood Product Manufacturing	321215
32121A	Veneer and Plywood Mills	321211, 321212
32121B	Particle Board, Fibreboard, and Waferboard Mills	321216, 321217
321911	Wood Window and Door Manufacturing	321911
321919	Other Millwork	321919
321920	Wood Container and Pallet Manufacturing	32192
321990	All Other Wood Product Manufacturing	32199
322110	Pulp Mills	32211
322121	Paper (except Newsprint) Mills	322121
322122	Newsprint Mills	322122
322130	Paperboard Mills	32213
322210	Paperboard Container Manufacturing	32221
322220	Paper Bag and Coated and Treated Paper Manufacturing	32222
322230	Stationery Product Manufacturing	32223
322290	Other Converted Paper Product Manufacturing	32229
323110	Printing	32311
323120	Support Activities for Printing	32312
324110	Petroleum Refineries	32411
324120	Asphalt Paving, Roofing and Saturated Materials Manufacturing	32412
324190	Other Petroleum and Coal Products Manufacturing	32419
325110	Petrochemical Manufacturing	32511
325120	Industrial Gas Manufacturing	32512
325130	Synthetic Dye and Pigment Manufacturing	32513
3251A0	Other Basic Chemical Manufacturing	32518, 32519
325200	Resin, Synthetic Rubber, & Artificial & Synthetic Fibres & Filaments Man.	3252
325310	Fertilizer Manufacturing	32531
325320	Pesticide and Other Agricultural Chemical Manufacturing	32532
325400	Pharmaceutical and Medicine Manufacturing	3254
325510	Paint and Coating Manufacturing	32551

Code	INDUSTRY TITLE - W	1997 NAICS
325520	Adhesive Manufacturing	32552
325610	Soap and Cleaning Compound Manufacturing	32561
325620	Toilet Preparation Manufacturing	32562
325900	Other Chemical Product Manufacturing	3259
326110	Unsupported Plastic Film, Sheet and Bag Manufacturing	32611
326120	Plastic Pipe, Pipe Fitting and Unsupported Profile Shape Manufacturing	32612
326130	Laminated Plastic Plate, Sheet and Shape Manufacturing	32613
326160	Plastic Bottle Manufacturing	32616
3261A0	Polystyrene, Urethane and Other Foam Product Manufacturing	32614, 32615
326193	Motor Vehicle Plastic Parts Manufacturing	326193
32619A	Miscellaneous Plastic Product Manufacturing	326191, 326198
326210	Tire Manufacturing	32621
326220	Rubber and Plastic Hose and Belting Manufacturing	32622
326290	Other Rubber Product Manufacturing	32629
327100	Clay Product and Refractory Manufacturing	3271
327200	Glass and Glass Product Manufacturing	3272
327310	Cement Manufacturing	32731
327320	Ready-Mix Concrete Manufacturing	32732
3273A0	Concrete Product Manufacturing	32733, 32739
327400	Lime and Gypsum Product Manufacturing	3274
327900	Other Non-Metallic Mineral Product Manufacturing	3279
331100	Iron and Steel Mills and Ferro-Alloy Manufacturing	3311
331210	Iron and Steel Pipes and Tubes Manufacturing from Purchased Steel	33121
331220	Rolling and Drawing of Purchased Steel	33122
331313	Primary Production of Alumina and Aluminum	331313
331317	Aluminum Rolling, Drawing, Extruding and Alloying	331317
331410	Non-Ferrous Metal (except Aluminum) Smelting and Refining	33141
3314A0	Non-Ferrous Metal (except Aluminum) Rolling, Drawing, Extruding and All	33142, 33149
331510	Ferrous Metal Foundries	33151
331520	Non-Ferrous Metal Foundries	33152
332100	Forging and Stamping	3321
332200	Cutlery and Hand Tool Manufacturing	3322
332311	Prefabricated Metal Building and Component Manufacturing	332311
33231A	All Other Plate Work and Fabricated Structural Product Manufacturing	332314, 332319
332320	Ornamental and Architectural Metal Products Manufacturing	33232
332410	Power Boiler and Heat Exchanger Manufacturing	33241
332420	Metal Tank (Heavy Gauge) Manufacturing	33242
332430	Metal Can, Box and Other Metal Container (Light Gauge) Manufacturing	33243
332500	Hardware Manufacturing	3325
332600	Spring and Wire Product Manufacturing	3326
332710	Machine Shops	33271
332720	Turned Product and Screw, Nut and Bolt Manufacturing	33272
332800	Coating, Engraving, Heat Treating and Allied Activities	3328
332900	Other Fabricated Metal Product Manufacturing	3329
333110	Agricultural Implement Manufacturing	33311
333120	Construction Machinery Manufacturing	33312
333130	Mining and Oil and Gas Field Machinery Manufacturing	33313
333200	Industrial Machinery Manufacturing	3332
333300	Commercial and Service Industry Machinery Manufacturing	3333
333400	Ventilation, Heating, Air-Conditioning and Commercial Refrigeration Equip.	3334
333500	Metalworking Machinery Manufacturing	3335
333600	Engine, Turbine and Power Transmission Equipment Manufacturing	3336
333910	Pump and Compressor Manufacturing	33391
333920	Material Handling Equipment Manufacturing	33392
333990	All Other General-Purpose Machinery Manufacturing	33399
334100	Computer and Peripheral Equipment Manufacturing	3341
334210	Telephone Apparatus Manufacturing	33421
334220	Radio & Television Broadcasting & Wireless Communications Equipment	33422

Code	INDUSTRY TITLE - W	1997 NAICS
334400	Semiconductor and Other Electronic Component Manufacturing	3344
334500	Navigational, Measuring, Medical and Control Instruments Manufacturing	3345
334600	Manufacturing and Reproducing Magnetic and Optical Media	3346
335100	Electric Lighting Equipment Manufacturing	3351
335200	Household Appliance Manufacturing	3352
335311	Power, Distribution and Specialty Transformers Manufacturing	335311
335312	Motor and Generator Manufacturing	335312
335315	Switchgear and Switchboard, and Relay and Industrial Control Apparatus	335315
335910	Battery Manufacturing	33591
335920	Communication and Energy Wire and Cable Manufacturing	33592
3359A0	Wiring Devices and All Other Electrical Equipment and Component Manufacturing	33593, 33599
336110	Automobile and Light-Duty Motor Vehicle Manufacturing	33611
336120	Heavy-Duty Truck Manufacturing	33612
336200	Motor Vehicle Body and Trailer Manufacturing	3362
336310	Motor Vehicle Gasoline Engine and Engine Parts Manufacturing	33631
336320	Motor Vehicle Electrical and Electronic Equipment Manufacturing	33632
336330	Motor Vehicle Steering and Suspension Components (except Spring) Manufacturing	33633
336340	Motor Vehicle Brake System Manufacturing	33634
336350	Motor Vehicle Transmission and Power Train Parts Manufacturing	33635
336360	Motor Vehicle Seating and Interior Trim Manufacturing	33636
336370	Motor Vehicle Metal Stamping	33637
336390	Other Motor Vehicle Parts Manufacturing	33639
336400	Aerospace Product and Parts Manufacturing	3364
336500	Railroad Rolling Stock Manufacturing	3365
336611	Ship Building and Repairing	336611
336612	Boat Building	336612
336900	Other Transportation Equipment Manufacturing	3369
337110	Wood Kitchen Cabinet and Counter Top Manufacturing	33711
337127	Institutional Furniture Manufacturing	337127
33712A	Household Furniture Manufacturing	337121, 337123, 337
337200	Office Furniture (including Fixtures) Manufacturing	3372
337900	Other Furniture-Related Product Manufacturing	3379
339100	Medical Equipment and Supplies Manufacturing	3391
339910	Jewellery and Silverware Manufacturing	33991
339920	Sporting and Athletic Goods Manufacturing	33992
339930	Doll, Toy and Game Manufacturing	33993
339940	Office Supplies (except Paper) Manufacturing	33994
339950	Sign Manufacturing	33995
339990	All Other Miscellaneous Manufacturing	33999
410000	Wholesale Trade	41
4A0000	Retail Trade	44-45
481000	Air Transportation	481
482000	Rail Transportation	482
483000	Water Transportation	483
484000	Truck Transportation	484
485100	Urban Transit Systems	4851
485200	Interurban and Rural Bus Transportation	4852
485300	Taxi and Limousine Service	4853
485A00	All Other Transit and Ground Passenger Transportation	4854, 4855, 4859
486200	Pipeline Transportation of Natural Gas	4862
486A00	Crude Oil and Other Pipeline Transportation	4861, 4869
487000	Scenic and Sightseeing Transportation	487
488000	Support Activities for Transportation	488
491000	Postal Service	491
492000	Couriers and Messengers	492
493130	Farm Product Warehousing and Storage	49313

Code	INDUSTRY TITLE - W	1997 NAICS
4931A0	All Other Warehousing and Storage	49311, 49312, 49319
511100	Newspaper, Periodical, Book and Database Publishers	5111
511200	Software Publishers	5112
512130	Motion Picture and Video Exhibition	51213
5121A0	Motion Picture & Video Production, Distribution, Post-Production & Other Motion Picture & Video Ind.	51211, 51212, 51219
512200	Sound Recording Industries	5122
513100	Radio and Television Broadcasting	5131
513200	Pay TV, Specialty TV and Program Distribution	5132
513300	Telecommunications	5133
514100	Information Services	5141
514200	Data Processing Services	5142
5A0110	Monetary Authorities - Central Bank	521
5A0120	Local Credit Unions	52213
5A0130	Banking and Other Depository Credit Intermediation	52211, 52219
5A0200	Insurance Carriers	5241
5A0300	Lessors of Real Estate	5311
5A0400	Owner-Occupied Dwellings	5311
5A0510	Automotive Equipment Rental and Leasing	5321
5A0520	Rental and leasing (except Automotive Equipment) and Lessors of Non-Financial Intangible Assets (except Copyrighted Works)	5322-5324, 533
5A0610	Non-Depository Credit Intermediation and Activities Related to Credit Intermediation	5222, 5223
5A0620	Agencies, Brokerages and Other Insurance Related Activities	5242
5A0630	Securities, Commodity Contracts, Funds, and Other Financial Investment	523, 526
5A0640	Offices of Real Estate Agents and Brokers and Activities Related to Real Estate	5312, 5313
5A0650	Management of Companies and Enterprises	551
541300	Architectural, Engineering and Related Services	5413
541500	Computer Systems Design and Related Services	5415
541800	Advertising and Related Services	5418
541A00	Legal, Accounting, Tax Preparation, Bookkeeping and Payroll Services	5411, 5412
541B00	Other Professional, Scientific and Technical Services	5414, 5416, 5417, 54
561500	Travel Arrangement and Reservation Services	5615
561600	Investigation and Security Services	5616
561700	Services to Buildings and Dwellings	5617
561A00	Other Administrative and Support Services	5611-5614, 5619
562000	Waste Management and Remediation Services	562
611A00	Education and Educational Support Services (excluding non-profit and gov.)	61
621100	Offices of Physicians	6211
621200	Offices of Dentists	6212
621A00	Miscellaneous Ambulatory Health Care Services	6213-6216, 6219
623000	Nursing and Residential Care Facilities	623
624000	Social Assistance	624
711000	Performing Arts, Spectator Sports and Related Industries	711
712000	Heritage Institutions (excluding Government Funded)	712
713200	Gambling Industries	7132
713A00	Amusement and Recreation Industries	7131, 7139
721100	Traveller Accommodation	7211
721A00	RV (Recreational Vehicle) Parks, Recreational Camps, and Rooming & Boarding	7212, 7213
722000	Food Services and Drinking Places	722
811100	Automotive Repair and Maintenance	8111
811A00	Repair and Maintenance (except Automotive Repair and Maintenance)	8112-8114
812200	Funeral Services	8122
812300	Dry Cleaning and Laundry Services	8123

Code	INDUSTRY TITLE - W	1997 NAICS
812A00	Personal Care Services and Other Personal Services	8121, 8129
813A00	Grant-Making, Civic, and Professional and Similar Organizations	8132-8134, 8139
814000	Private Households	814
F10100	Operating Supplies	Fictive
F10200	Office Supplies	Fictive
F10300	Cafeteria Supplies	Fictive
F10400	Laboratory Supplies	Fictive
F20100	Travel & Entertainment	Fictive
F20200	Advertising and Promotion	Fictive
F30000	Transportation Margins	Fictive
NP1100	Religious Organizations	8131
NP1200	Non-Profit Welfare Organizations	Fictive
NP1300	Non-Profit Sports and Recreation Clubs	Fictive
NP2000	Non-Profit Education Services	Fictive
NP1900	Other Non-Profit Institutions Serving Households	Fictive
GS1100	Hospitals	622
GS1200	Government Residential Care Facilities	Fictive
GS2100	Universities	6113
GS2210	Government Elementary and Secondary Schools	6111
GS2220	Government Community Colleges and C.E.G.E.P.s	6112
GS2230	Other Govt Education Services	Fictive
GS3000	Defence Services	9111
GS4000	Other Municipal Government Services	Fictive
GS5000	Other Provincial and Territorial Government Services	Fictive
GS6000	Other Federal Government Services	Fictive
GS7000	Other Aboriginal Government Services	Fictive

LETHBRIDGE PERFORMING ARTS CENTRE
SPACE PROGRAM

THEATRE PROJECTS Consultants

SPACE PROGRAM - PAC
Lethbridge PAC
Version 5.0
3/11/2010

THEATRE PROJECTS Consultants

	Ver 1.0	Initial issue
	Ver 2.0	Added metric/notes after meeting in CT
	Ver 3.0	Reduced square footage
	Ver 4.0	After presentation to the steering committee
current	Ver 5.0	Fixed a few numbering anomolies

PROGRAMMED AREAS SUMMARY		Net M^2	Net Sq Ft
Common	Public Areas	3,013	32,435
	Common Subtotal	3,013	32,435
1250 Seat Theatre			
	Performance Spaces	*2,512*	*27,041*
	Stage Support	*559*	*6,020*
	Performer's Support	*660*	*7,107*
	1250 Seat Theatre Subtotal	3,732	40,168
250 Seat Rehearsal/Recital Hall			
	Performance Spaces	*461*	*4,960*
	Stage Support	*51*	*550*
	Performer's Support	*135*	*1,452*
	250 Seat Rehearsal/Recital Hall Subtotal	647	6,962
Rehearsal	Rehearsal Space	0	0
	Rehearsal Subtotal	0	0
Administration	Administrative and Production Offices	313	3,365
	Administrative Subtotal	313	3,365
Services	Services	181	1,945
	Services Subtotal	181	1,945
	TOTAL NET AREA	**7,885**	**84,875**
Grossing Factor	1.80		
	PROGRAMMED GROSS AREA	**14,193**	**152,775**
Non-Programmed Areas Summary			
	Circulation		
	Mechanical and Electrical		
	Inaccessible Spaces		

Space Program - PAC
1000 series: Public Areas

Lethbridge PAC
Version 5.0
3/11/2010

VENUE	Rm #	Name	TPC NET M^2	TPC NET SF	Occup	Unit	Qty	W	D	H	Notes
	1000	**PUBLIC AREAS**			Tot.Cap.	Levels					
					1,500	3					
COMMON	*1000*	*LOBBIES*									
COMMON	1001	Drop Off Area									
COMMON	1002	Entrance Vestibules	209	2,250		1.5	1				
COMMON	1003	Outer Lobby	70	750		0.5	1				
COMMON	1004	Inner Lobby	1115	12,000		8	1				
COMMON	1005	Public Circulation	697	7,500		5	1				
			2,090	*22,500*		*15.00*	per person				
COMMON	*1100*	*TICKETING*									
COMMON	1101	Box Office Sales Windows	14	150	3	50					
COMMON	1102	Box Office Workroom	22	240	5	48					
COMMON	1103	Box Office Manager's Office	9	100	1	100					
COMMON	1104	Box Office FOH Office	7	80	1	80					
COMMON	1106	Box Office Storage	7	80	1	80					
			0								
COMMON	1110	Telemarketing/Group sales	0	0							deleted
COMMON	1111	Telemarketing Pantry	0	0	0	80					deleted
COMMON	1112	Telemarketing Storage	0	0	0	60					deleted
COMMON	*1200*	*CONCESSIONS / BARS*									
COMMON	1201	Concessions / Bars	52	563	47	1.5		70	8		Occ=P*25%/8
COMMON	1202	Concessions / Bar Storage	8	85		15%					% of Concessions
COMMON	1203	Concessions / Bar Cool Storage	8	84		15%					% of Concessions
COMMON	*1300*	*SALES*									
COMMON	1301	Gift Shop	42	450				30	15		
COMMON	1302	Gift Shop Storage	17	180		40%					% of Gift Shop
COMMON	1401	Café Seating Area	0	0	0	18					deleted
COMMON	1402	Cafe Storage	0	0		20%					% of Café
COMMON	1413	Catering kitchen	28	300							Warming and simple food prep

Space Program - PAC Lethbridge PAC
1000 series: Public Areas Version 5.0
3/11/2010

VENUE	Rm #	Name	TPC NET M^2	TPC NET SF	Occup	Unit	Qty	W	D	H	Notes
COMMON	*1500*	*RECEPTION*									
COMMON	1501	Patrons lounge	104	1,120	70	16					
COMMON	1502	Patrons Lounge Restrooms	24	260	4	65					
COMMON	1503	Patrons Lounge Catering Service Area	19	200							
COMMON	1504	Patrons Lounge Cloak Room	5	50							
COMMON	1505	Patrons Lounge Storage	5	50							
COMMON	*1600*	*OFFICES*									
COMMON	1601	House Manager's Office	10	110	2	55					
COMMON	1602	Asst. House Manager's Office	0	0	0	80					deleted
COMMON	1603	First Aid room including restroom	12	125	1	125					
COMMON	1604	Food Services Managers Office	15	160	2	80					removed one occup
COMMON	1605	Gift Shop Managers Office	7	80	1	80					
COMMON	*1700*	*SERVICES*									
COMMON	1701	Customer Service	14	*150*							
COMMON	1702	Coatcheck / IR System Distribution	69	743	1,350	0.55					
		FOH Staff / Usher quantity	1	13							
COMMON	1703	FOH Staff Lockers: Male	3	35	7	5					locker only
COMMON	1704	FOH Staff Lockers: Female	3	35	7	5					locker only
COMMON	1705	Janitors Closet	3	36	3	12					Qty levels * 1
COMMON	1706	Public Elevators									In gross
COMMON	1707	Public Telephones / waterfountains									In gross
COMMON	1708	Lobby Dimmer Room	7	80			1				
COMMON	*1800*	*STORAGE*									
COMMON	1801	FOH Operations Storage	45	480		4%					% of Inner Lobby (furniture/programs/tables)
COMMON	1802	FOH Janitors Storage	5	50							
COMMON	*1900*	*RESTROOMS*									
COMMON	1901	Public Restrooms: Male	80	857	21	40					Capacity div by 70
COMMON	1902	Public Restrooms: Female	255	2,750	50	55					Capacity div by 30
COMMON	1903	Public Restroom: Uni-sex, H/C, Family Assist	22	240	3	80					Qty levels * 1
		TOTAL PUBLIC AREAS	3,013	32,435							

Space Program - PAC
2000 series: Performance Spaces

Lethbridge PAC
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VENUE	Rm #	Name	TPC NET M^2	TPC NET SF	Occup	Unit	Qty	W	D	H	Notes
MP	**2000**	**PERFORMANCE SPACES - 1250 Seat Theatre**									
MP	*2100*	*AUDITORIUM*			1,250						1250 to stage edge
MP	2101	Orchestra floor	581	6,250	*625*	10	50%				
MP	2102	Balcony 1	267	2,875	*250*	11.5	20%				
MP	2103	Balcony 2	401	4,313	*375*	11.5	30%				
MP	2104	Auditorium Sound Light Locks	143	1,536		96	16	12	8		
MP	2105	Plenum under seating									in gross?
MP	*2200*	*STAGE Proscenium*		Pros	W	H		W	D	H	
MP	2201	Mainstage	478	5,150	50	30		103	50	75	
MP	2202	Stage SLL's	21	224		56	4	8	7		
MP	2203	Equipment/Scenery SLL's	14	150							
MP	2204	Orchestra Shell Storage	65	704			1	88	8	30	Stored upstage
MP	2205	Quick change rooms									in gross
MP	2206	Tech Street US/DS	111	1,200			2	60	10		
MP	2207	Tech Street crossover	96	1,030			1	103	10		
MP	*2300*	*CATWALKS*						*W*	*L*		
MP	2301	Loading gallery					1	5	50		in gross
MP	2302	Fly floors					2	8	50		in gross
MP	2303	Crossover					1	90	3		in gross
MP	2304	Auditorium catwalks					3	4	75		in gross
MP	*2400*	*UNDERSTAGE*						W	D		
MP	2401	Orchestra underhang	23	250	15	17		50	5		
MP	2402	Orchestra pit/forestage apron lift A	51	550	32	17		50	11		Forestage (and flanks)
MP	2403	Lift B - stage extender						50	7		Pit extender
MP	2403	subtotal for orch pit			47	musicians					
MP	2404	Forestage Lift Machinery									In orchestra pit
MP	2405	Forestage A Seat Wagon Store	86	928				58	16		Under plenum
MP	2406	Forestage B Seat Wagon Store	0	0							Seats stored upstage
MP	2407	Orch Pit SLL's									in gross
MP	2408	Orch Pit Inst Storage	22	240				12	20		adjacent to pit, only inst storage
MP	2409	Trap room	0	0			0	42	32		deleted
MP	2410	Trap room SLL									in gross
MP	2411	Counterweight Pit	37	400				8	50		

Space Program - PAC												Lethbridge PAC
2000 series: Performance Spaces												Version 5.0
												3/11/2010
VENUE	Rm #	Name	TPC NET M^2	TPC NET SF	Occup	Unit	Qty	W	D	H	Notes	
MP	*2500*	*OVERHEAD*										
MP	2501	Grid	478	*5,150*				103	50		in gross	
	2502	Forestage Grid									in gross	
MP	*2600*	*OFFICES/SUPPORT*										
MP	2601	Control - light	9	100	1	100						
MP	2602	Control - sound	14	150	1	150						
MP	2603	Control - SM	7	80	1	80						
MP	2604	Control - projection	14	150	1	150						
MP	2605	Projection Washroom	5	50	1	50						
MP	2606	Directors booth	7	70	1	70						
MP	2607	Follow spots	21	225	3	75						
MP	2608	Side Followspot Position									in gross	
MP	*2700*	*SERVICES*										
MP	2701	Dimmer room	15	160	1	160					Could be combined??	
MP	2702	Sound Rack Room	20	220	1	220					Central Comms and Patch	
MP	*2900*	*RESTROOMS*										
MP	2901	Control/followspot	3	36	1	36						
MP		TOTAL - PERFORMANCE AREAS	2,512	27,041								

Space Program - PAC Lethbridge PAC
2000 series: Performance Spaces Version 5.0
3/11/2010

VENUE	Rm #	Name	TPC NET M^2	TPC NET SF	Occup	Unit	Qty	W	D	H	Notes
RH	**2000**	**PERFORMANCE SPACES - 250 Seat Rehearsal/Recital Hall**									
RH	2100	Room	424	4,560				60	76	34	
RH	2101	Auditorium sound & light locks									in gross
RH	2102	Platform sound & light locks					2				in gross
RH	2301	Auditorium catwalks - stage end					4	4	54		in gross
RH	2302	Auditorium catwalks - house end					2	4	36		in gross
RH	2303	Tech gallery					2	12	44		in gross
RH	2601	Lighting control booth	9	100			1	10	10		
RH	2602	Sound / Recording booth	11	120			1	12	10		
RH	2701	Dimmer room	7	80			1	8	10		Could be combined
RH	2702	Sound rack room	9	100			1	10	10		Could be combined
RH		TOTAL - PERFORMANCE AREAS	461	4,960							

Space Program - PAC											Lethbridge PAC
3000 series: Stage Support Spaces											Version 5.0
											3/11/2010
VENUE	Rm #	Name	TPC NET M^2	TPC NET SF	Occup	Unit	Qty	W	D	H	Notes
MP	**3000**	**STAGE SUPPORT - 1250 Seat Theatre**									
MP	*3000*	*SERVICES*									
MP	3001	Janitor's closet	4	40	2	20					
MP	*3200*	*STORAGE*									
MP	3201	Scenery dock	191	2,060		40%				30	30 ft clear
MP	3202	Rigging store	10	103		2%					
MP	3203	Props store	0	0		0%					deleted
MP	3204	Lighting store/shop	24	258		5%					
MP	3205	Sound store/shop	24	258		5%					Includes Radio Mic Rack reduced
MP	3206	Piano store	19	200	2	100					
MP	3207	Tool Storage	9	100							
MP	3208	General Stage Storage	93	1,000				25	40		
MP	*3300*	*WORKSHOPS*									
MP	3301	Scenery maintenance	38	412		412	1				20% of scene dock
MP	3302	Property shop	0	0	2	150	0				deleted
MP	3303	Electrics Office	14	150	2	150	1				HOD Office
MP	3304	Sound office	14	150	2	150	1				HOD Office
MP	3305	Paint Area	14	150		150	1				
MP	*3400*	*STAGE OFFICES*									
MP	3401	Stage management	11	120	2	60					reduced by one occup
MP	3402	Visiting production office	11	120	2	60					
MP	3403	Production Manager	11	120	1	120					
MP	3404	Tech Director	11	120	1	120					
MP	*3500*	*CREW ROOMS*									
MP	3501	Crew Ready room	17	180	12	15					close to stage
MP	3502	Crew Lockers M	11	120	8	15					
MP	3503	Crew Lockers F	11	120	8	15					
MP	*3900*	*WASHROOMS*									
MP	3901	Crew washrooms/showers M	7	80	2	40					
MP	3902	Crew washrooms/showers F	7	80	2	40					
MP	3903	Offstage washrooms	7	80	1	40	2				
MP		*RECEIVING*									
MP	1	Loading Dock (BOH)									See services
MP	2	Receiving Room (BOH)									See services
MP	3	Holding/Receiving Lockup									See services
MP		TOTAL -STAGE SUPPORT	559	6,020							

Space Program - PAC
3000 series: Stage Support Spaces

Lethbridge PAC
Version 5.0
3/11/2010

VENUE	Rm #	Name	TPC NET M^2	TPC NET SF	Occup	Unit	Qty	W	D	H	Notes
RH	**3050**	**STAGE SUPPORT - 250 Seat Rehearsal/Recital Hall**									
RH	3251	Instrument uncasing	14	150							
RH	3252	Piano storage	14	150		150	1				reduced
RH	3253	General Storage	14	150							music stands, chairs, & misc
RH	3951	Backstage restroom (male)	5	50	1	50	1				
RH	3952	Backstage restroom (female)	5	50	1	50	1				
RH		TOTAL -STAGE SUPPORT	51	550							

Space Program - PAC Lethbridge PAC

4000 series: Performer Support Spaces Version 5.0

3/11/2010

VENUE	Rm #	Name	TPC NET M^2	TPC NET SF	Occup	Unit	Qty	W	D	H	Notes
MP	**4000**	**PERFORMERS SUPPORT - 1250 Seat Theatre**									
MP	4100	*DRESSING ROOMS*									
MP	4101	Star dressing Room	49	525	1	175	3	3			Suite with sitting room, WC, Shower
	4102	1/2 dressing room	74	800	2	100	4	8			Inc. WC and Shower
MP	4103	4/8 dressing room	123	1,320	8	55	3	24			Inc. WC and Shower
MP	4104	Chorus/Orchestra dressing room	150	1,620	12	45	3	36			Inc. WC and Shower
MP	4105	Physical Therapy Room	0	0	4	30	0				deleted
							Total	71			
MP	*4200*	*MUSICIANS (PIT)*					Total	47			From Orchestra pit total
MP	4201	Musicians changing (male)	46	500	20	25	1				Lockers
MP	4202	Musicians changing (female)	46	500	20	25	1				Lockers
MP	4203	Conductor	14	150	1	150	1				
MP	*4300*	*WARDROBE*									
MP	4301	Wardrobe	28	300	4	75					Close to Dressing Rooms
MP	4302	Laundry	14	150	1	150					Flat access from elevator
MP	4303	Dressers stations									Moved to gross
MP	*4600*	*PERFORMER FACILITIES*									
MP	4601	Green room/Perf Lounge	98	1,050	70	15					
MP	*4900*	*WASHROOMS*									
MP	4901	Restrooms - male	9	96	2	48					
MP	4902	Restrooms - female	9	96	2	48					
MP		TOTAL PERFORMERS SUPPORT	660	7,107							

Space Program - PAC Lethbridge PAC

4000 series: Performer Support Spaces Version 5.0

3/11/2010

VENUE	Rm #	Name	TPC NET M^2	TPC NET SF	Occup	Unit	Qty	W	D	H	Notes
RH	**4050**	**PERFORMERS SUPPORT - 250 Seat Rehearsal/Recital Hall**									
RH	4151	1-2 person dressing room	37	400	2	100	2				including toilets and showers - also phone for office use
RH	4152	4-8 person dressing room	61	660	6	55	2				Accommodates 12 performers
RH	4651	Musician Lounge	18	192	16	12	1				
RH	4652	Musicians Locker Female	0	0	8	9	0				In gross?
RH	4653	Musicians Locker Male	0	0	8	9	0				In gross?
RH	4654	Canteen/Vending	0	0		25	1				In gross?
RH	4951	Musician Restroom / Change - Female	9	100	4	25	1				no showers
RH	4952	Musician Restroom / Change - Male	9	100	4	25	1				no showers
RH		TOTAL PERFORMERS SUPPORT	135	1,452							

Space Program - PAC												Lethbridge PAC
5000 series: Production Spaces												Version 5.0
												3/11/2010
VENUE	Rm #	Name	TPC NET M^2	TPC NET SF	Occup	Unit	Qty	W	D	H	Notes	
MP	**5000**	**PRODUCTION SPACES - 1250 Seat Theatre**										
MP	5001	Rehearsal Room	0	0	0	20	0	60	45	32	Production rehearsal only	
MP	5002	Rehearsal room office	0	0	2	50	0	15	12			
MP	5003	Rehearsal room storage	0	0		6%	0					
MP	5004	Rehearsal Room SLL									in gross	
MP	5005	Warm up ensemble rooms	0	0			0	20	15			
MP	5006	Warm up studios	0	0			0	12	15			
MP	5007	Restrooms (Rehearsal users)	0	0	1	50	0					
MP		TOTAL - PRODUCTION SPACES	0	0								

Space Program - PAC Lethbridge PAC
7000 series: AdministrationSpaces Version 5.0
3/11/2010

VENUE	Rm #	Name	TPC NET M^2	TPC NET SF	Occup	Unit	Qty	W	D	H	Notes
PAC	**7000**	**ADMINISTRATION - PAC**									
PAC		TOTAL - ADMINISTRATION	313	3365							Supports a staff of approx 15 (offices, reception, conference room, etc)

Space Program - PAC Lethbridge PAC

8000 series: AdministrationSpaces Version 5.0

3/11/2010

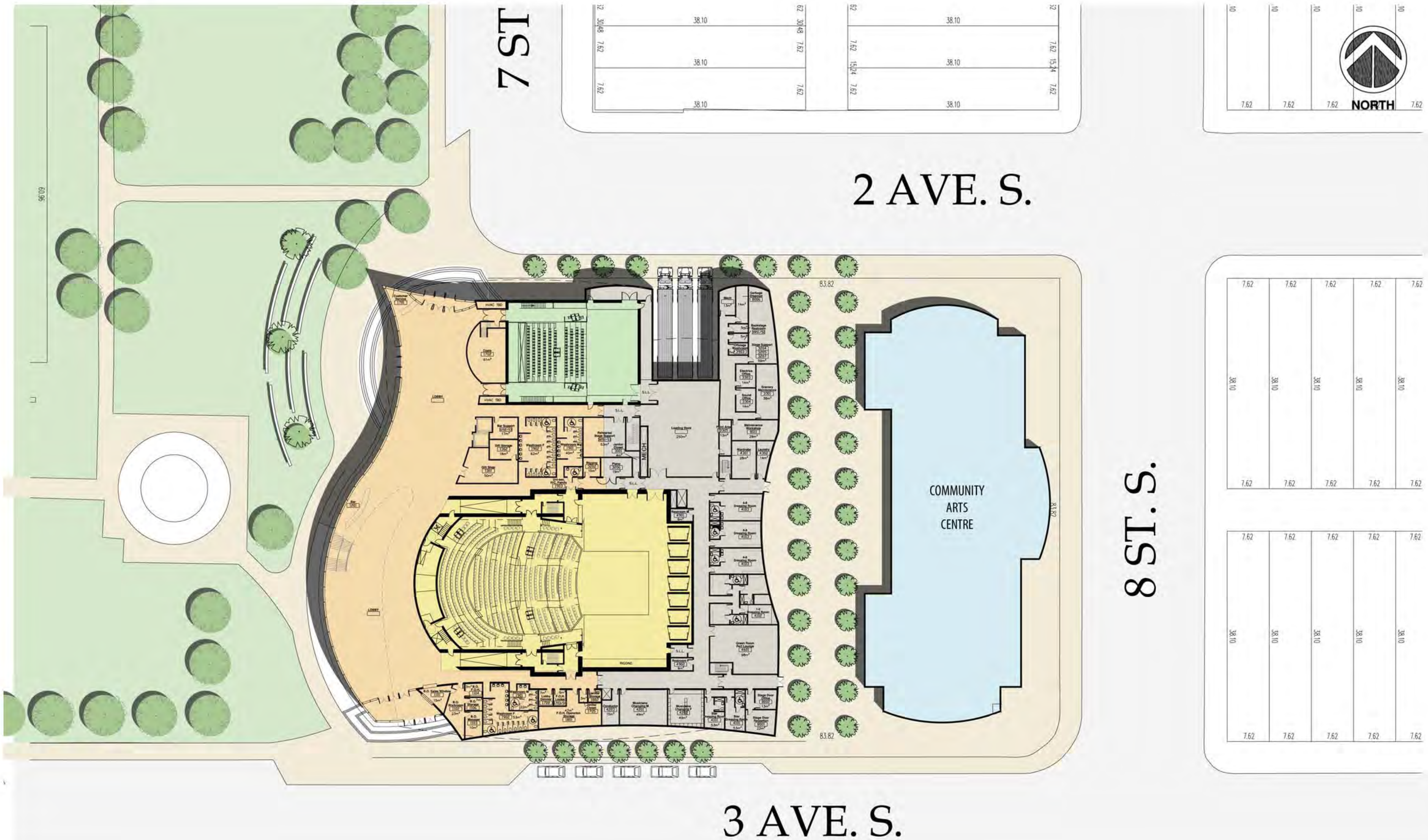
VENUE	Rm #	Name	TPC NET M^2	TPC NET SF	Occup	Unit	Qty	W	D	H	Notes
MP	**8000**	**SERVICES**									
MP	8001	Stage door reception	21	225			1	15	15		
MP	8002	Stage door office	13	140	2	70	1				Could include fire control/receiving?
MP	8003	Security/Fire control	0	0		80	0				
MP	8004	Loading dock - Facility Deliveries	60	650			1	13	50		
MP	8005	Truck Dock							12		exterior or gross - 3 bays
MP	8006	Garbage disposal - interior or exterior	14	150		150	1				
MP	8007	Production/Admin Dumpster	0								
MP	8008	Building Engineer	14	150	2	75					
MP	8009	Maintenance Engineer	0	0	0	50					deleted
MP	8010	Maintenance Staff Lockers	11	120	8	15					reduced cap
MP	8011	Maintenance Workshop	28	300				20	15		reduced cap
MP	8012	HVAC Plant									in gross
MP	8013	Phone intake									in gross
MP	8014	Electrical intake									in gross
MP	8015	Janitorial store	14	150		150	1				
MP	8016	Washrooms	6	60		30	2				
MP		TOTAL - SERVICES	181	1,945							

SCHEMATIC DESIGN DRAWINGS OF THE PERFORMING ARTS CENTRE

FERRARI WESTWOOD BABITS
ARCHITECTS

THEATRE PROJECTS Consultants

threshold



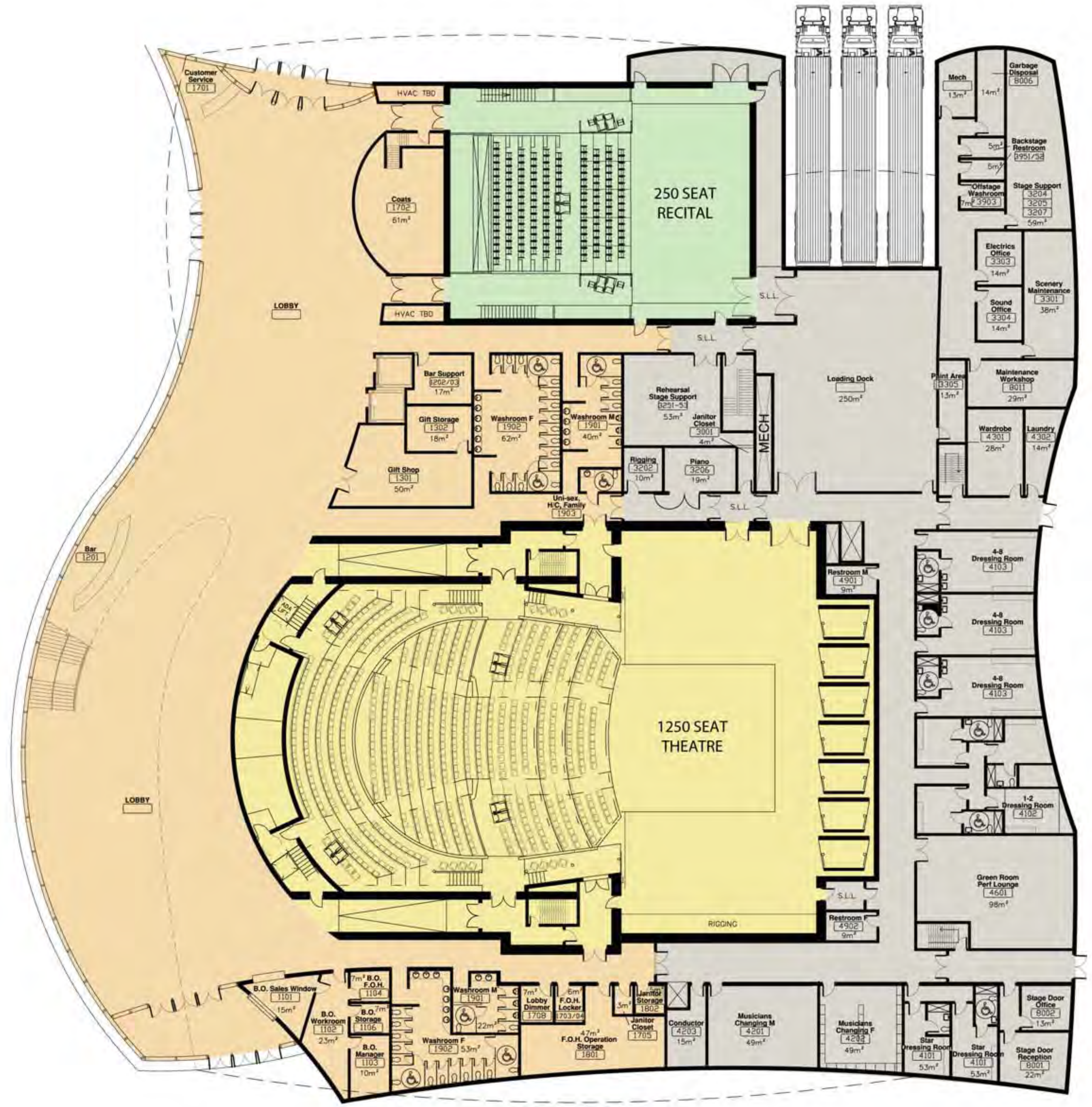
Lethbridge Performing Arts Centre Schematic Design **Site Plan**

FERRARI WESTWOOD BABITS ARCHITECTS

THEATRE PROJECTS Consultants

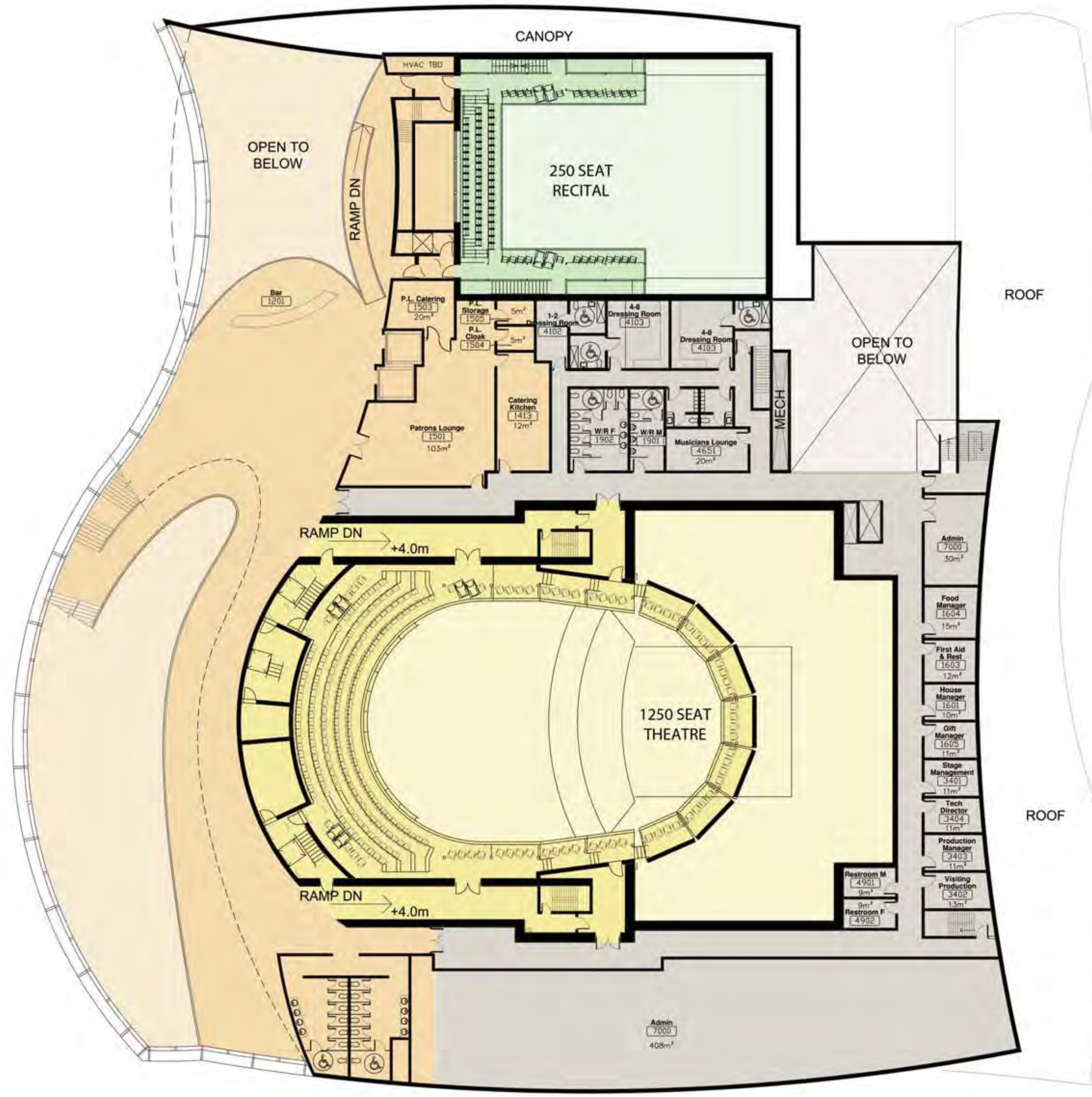
webb management services inc

threshold



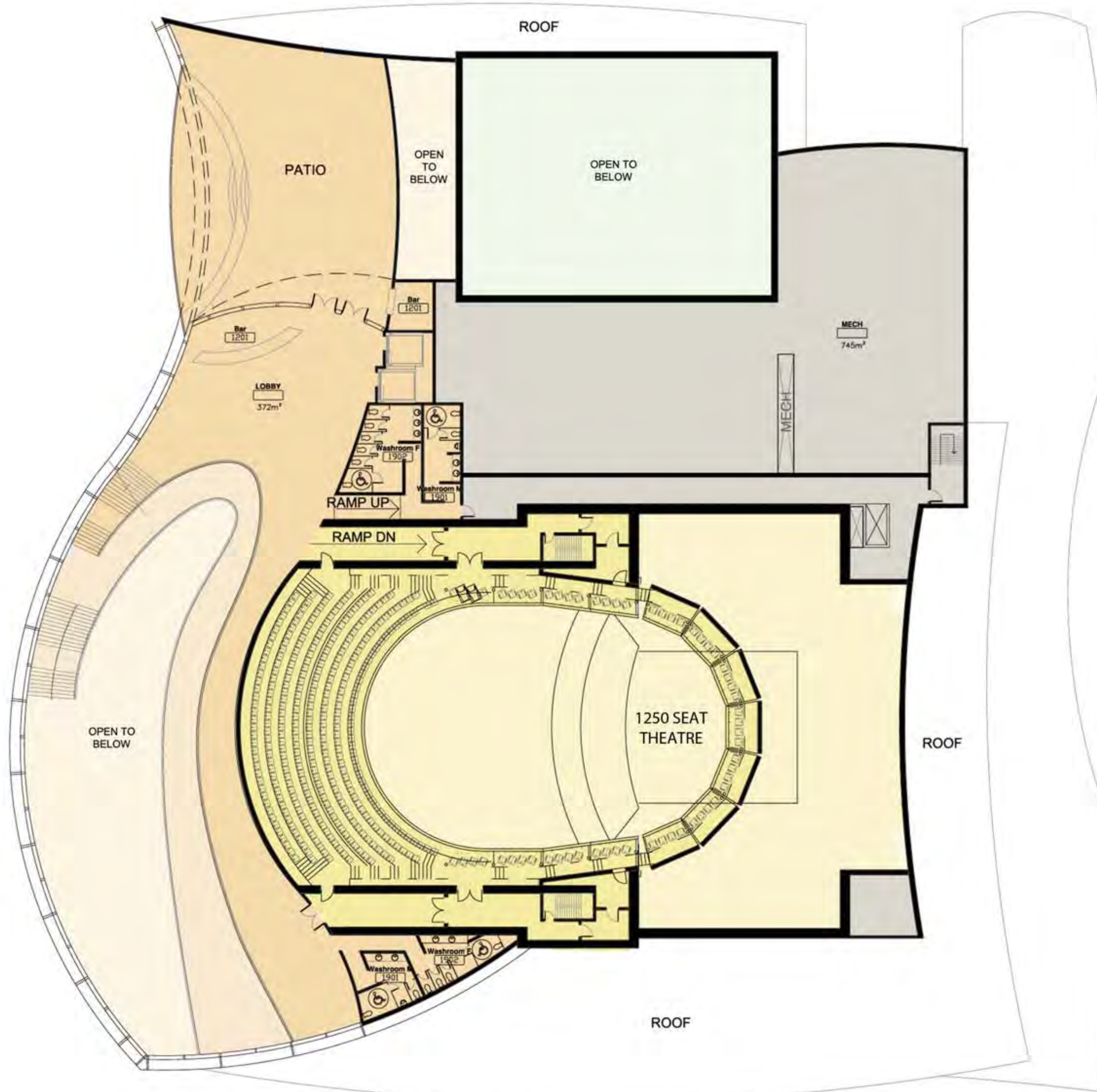
Lethbridge Performing Arts Centre Schematic Design **Main Floor Plan**

FERRARI WESTWOOD BABITS ARCHITECTS
THEATRE PROJECTS Consultants
webb management services inc
threshold



Lethbridge Performing Arts Centre Schematic Design **Second Floor Plan**

FERRARI WESTWOOD BABITS ARCHITECTS
THEATRE PROJECTS Consultants
webb management services inc
threshold



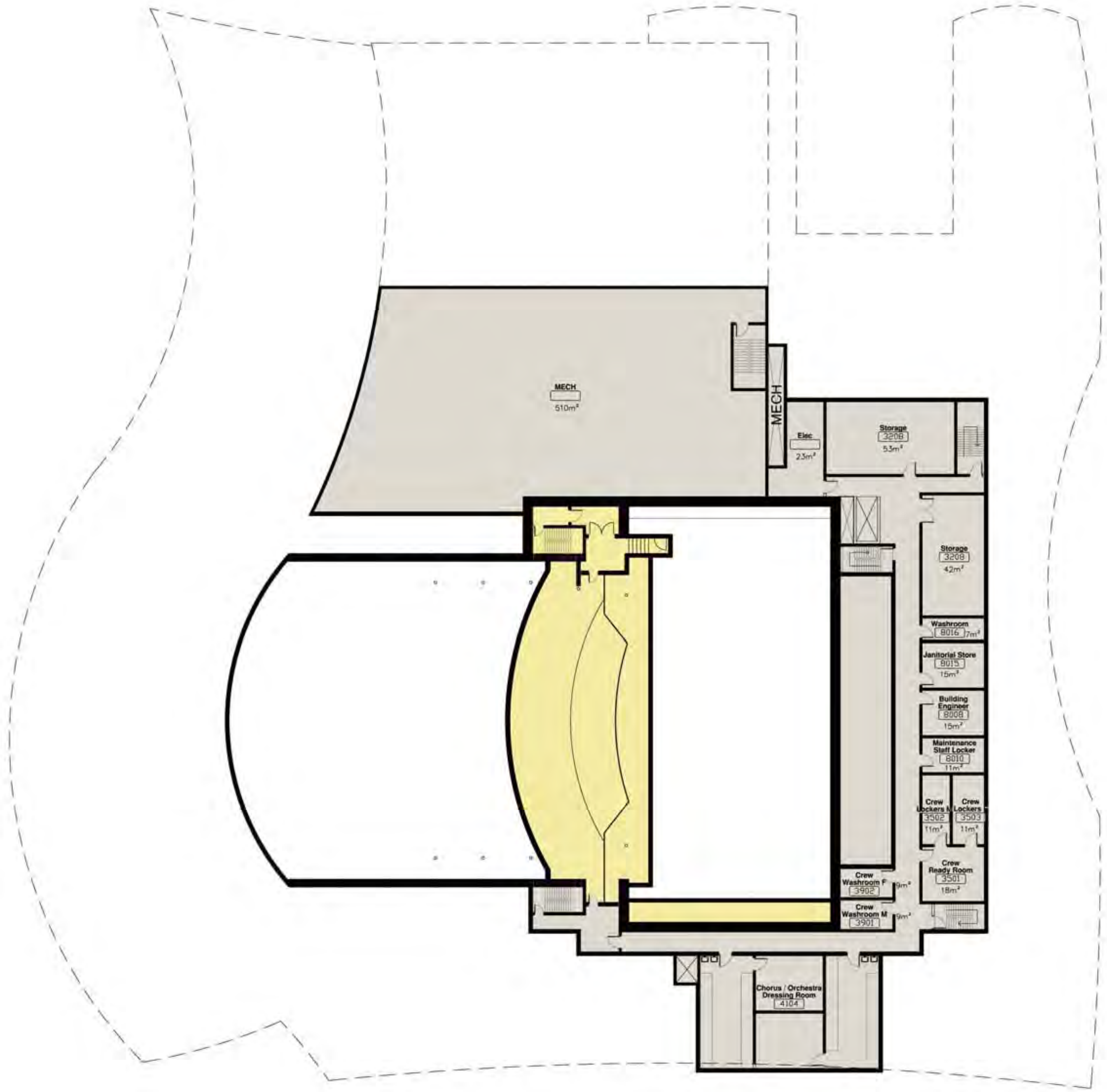
Lethbridge Performing Arts Centre Schematic Design **Third Floor Plan**

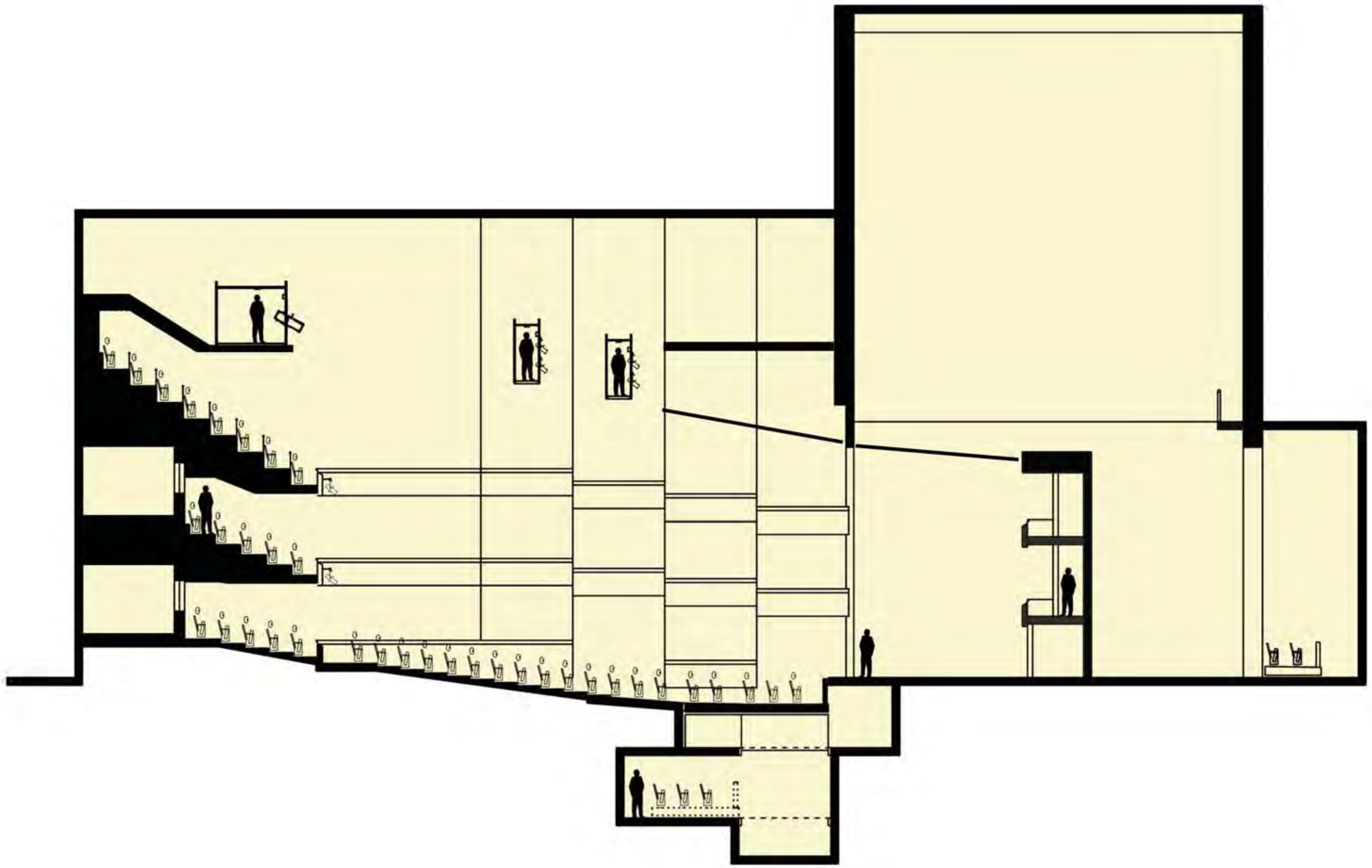
FERRARI WESTWOOD BABITS ARCHITECTS

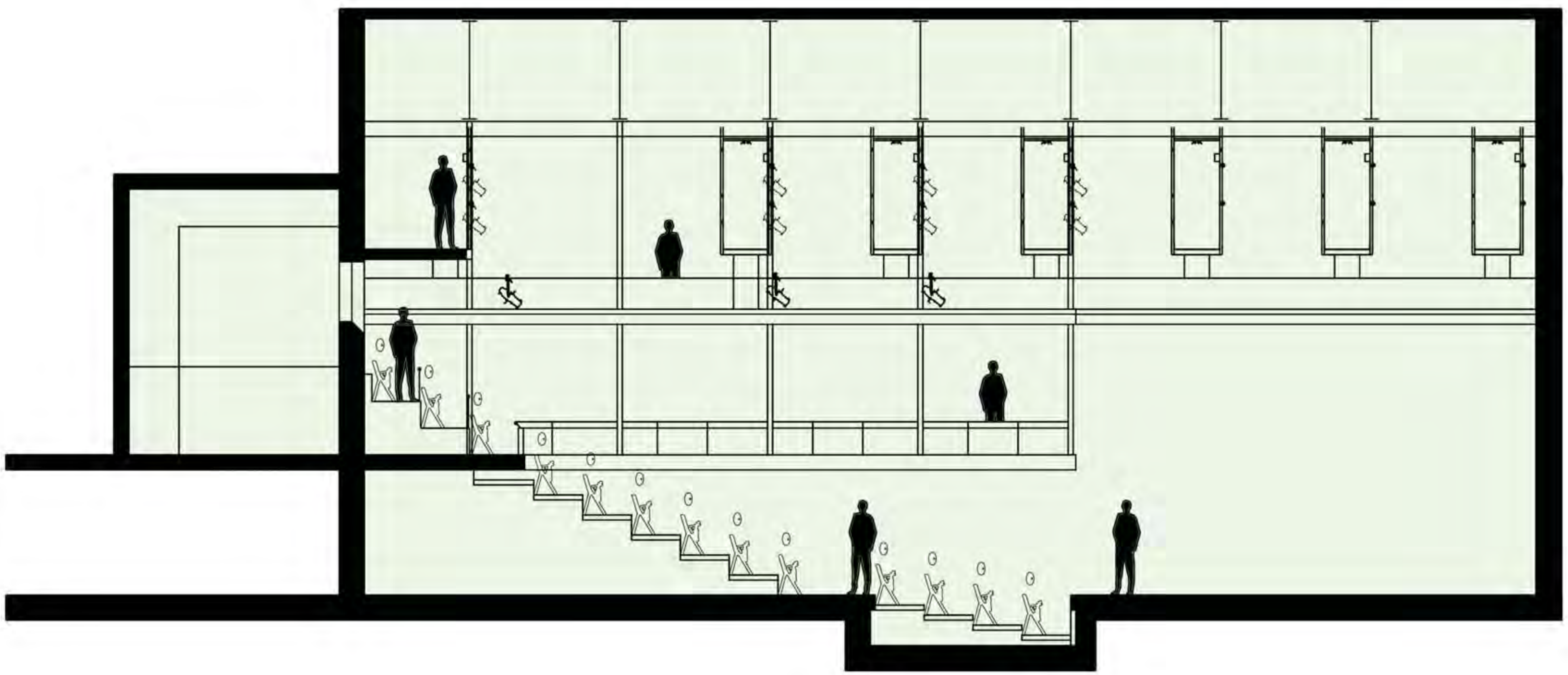
THEATRE PROJECTS Consultants

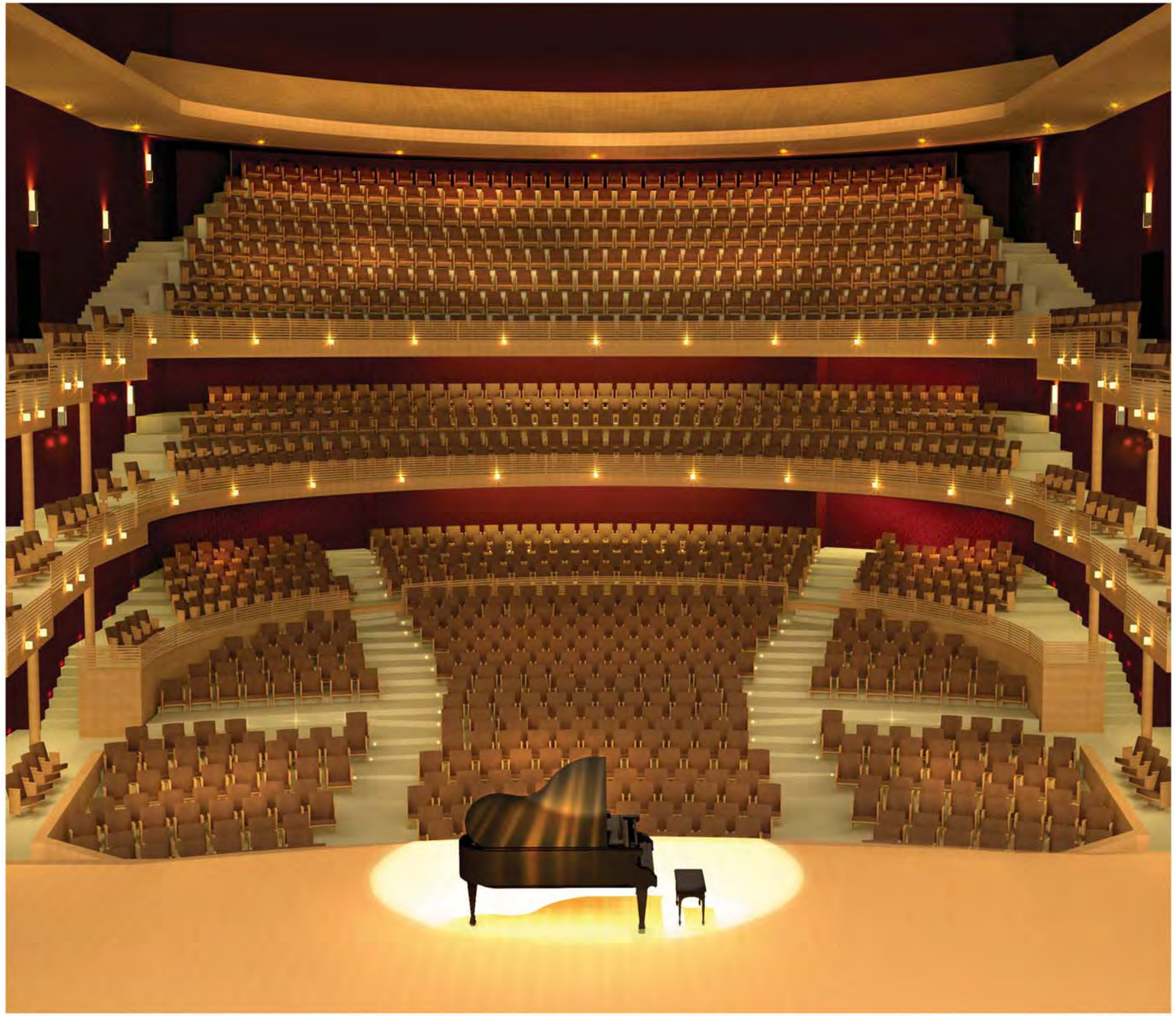
webb management services inc

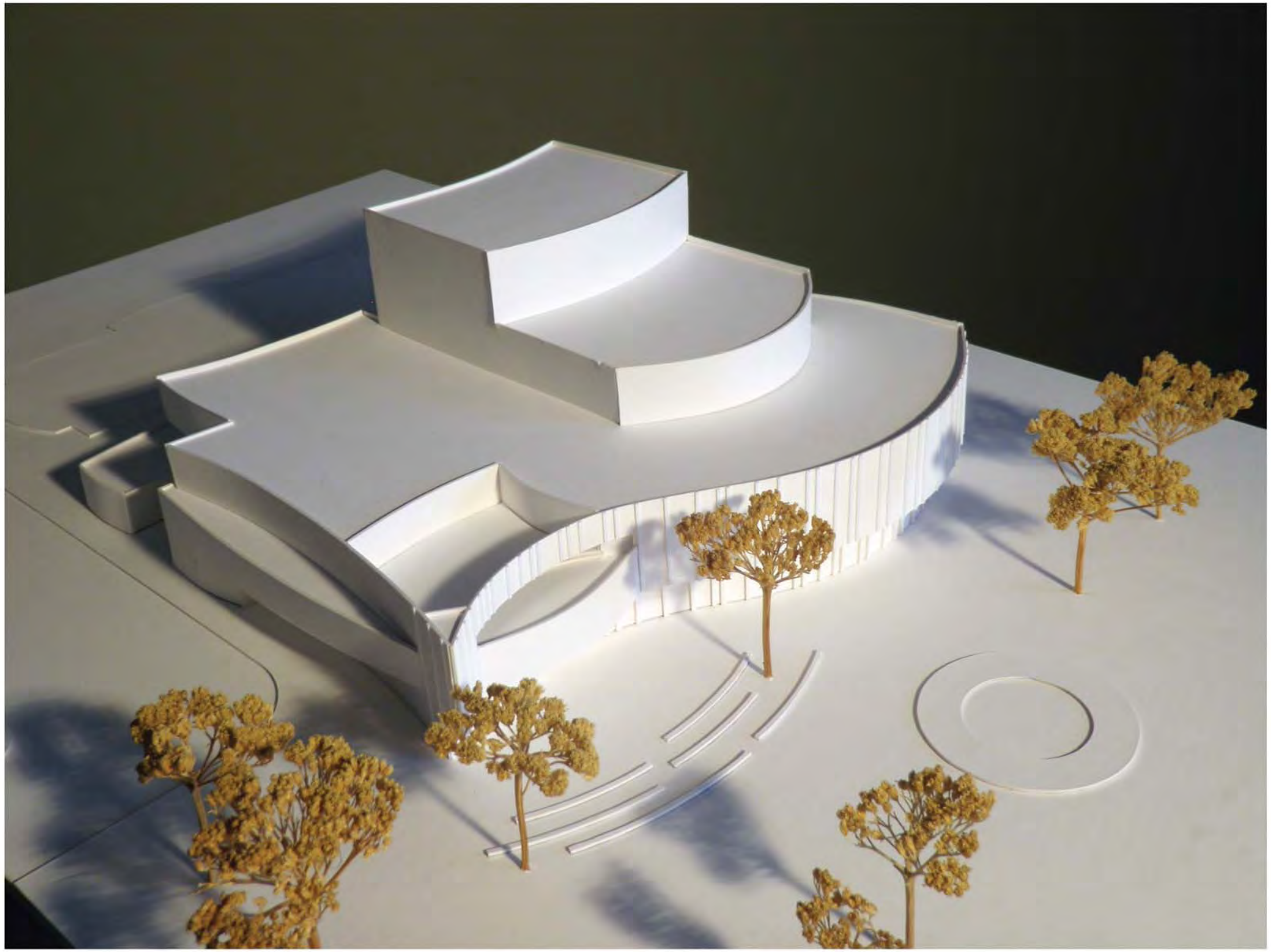
threshold

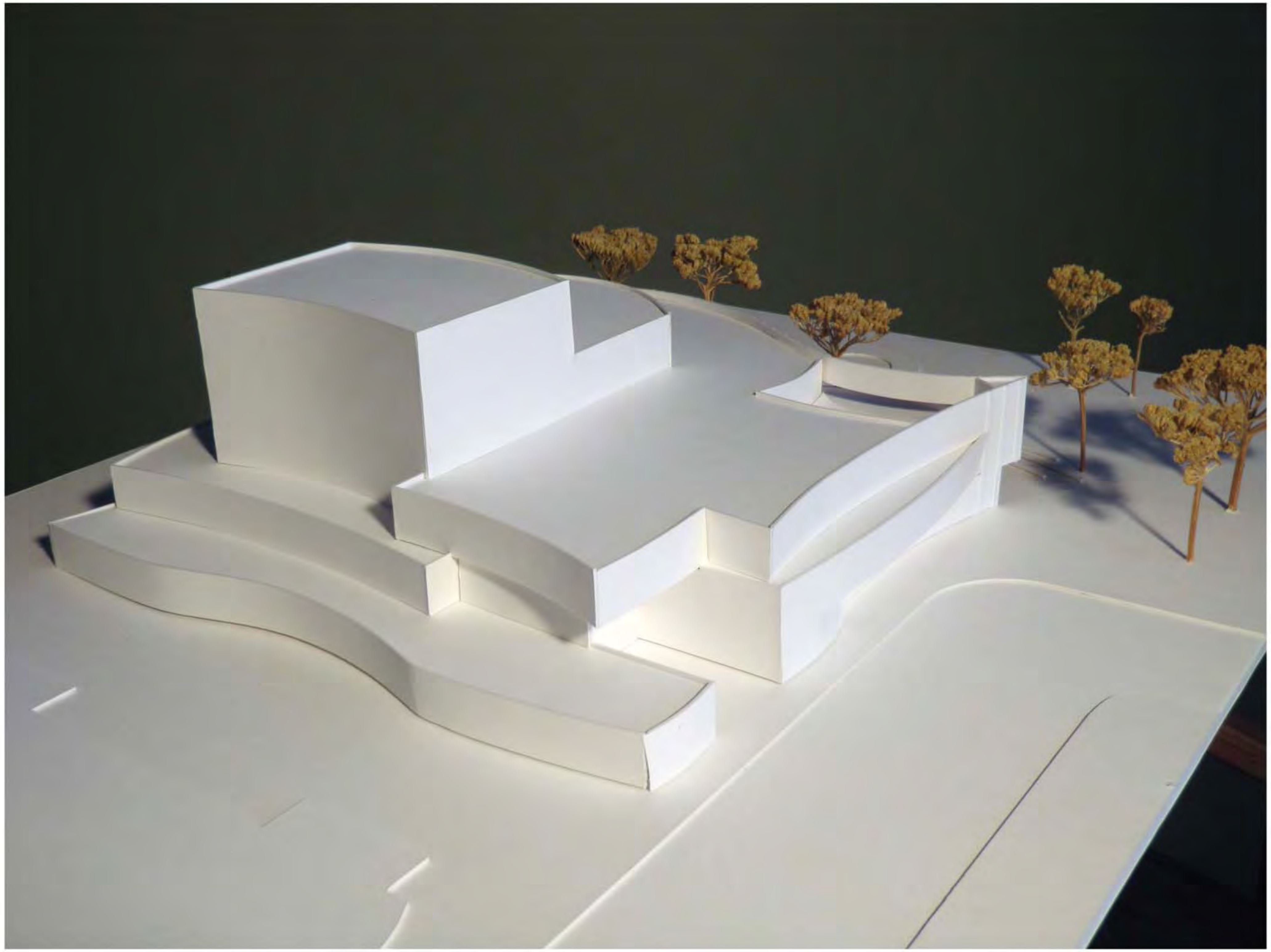

MECH
510m²
MECH
Elec
23m²
Storage
3208
53m²
Storage
3208
42m²
Washroom
8016
7m²
Janitorial Store
8015
15m²
Building Engineer
8008
15m²
Maintenance Staff Locker
8010
11m²
Crew Lockers M
3502
11m²
Crew Lockers F
3503
11m²
Crew Ready Room
3501
18m²
Crew Washroom F
3902
9m²
Crew Washroom M
3901
9m²
Chorus / Orchestra Dressing Room
4104











SCHEMATIC DESIGN COST PLAN
April 2010

for

THE NEW LETHBRIDGE PERFORMING ARTS CENTRE
Lethbridge, Alberta

Prepared For:

FERRARI WESTWOOD BABITS
ARCHITECTS

Prepared By:

Tech-Cost Consultants Ltd.

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TABLE OF CONTENTS

1. INTRODUCTION

1.1 Background

The new Lethbridge Performing Arts Centre will be a 3 storey building, with partial basement, located at the intersection of 7th St. S and 2nd Ave. S. The building will house a 1,250 seat Theatre, and a 250 seat Rehearsal/Recital Hall. The main level will contain dressing rooms, a loading dock and support. The second level will be comprised of administration areas, a patron's lounge, and balconies. The third level will consist of a theatre balcony, bar and patio, and mechanical room.

	Activity	Estimated Cost In Current Dollars	Area (m²)	Cost/m²
1.	**Net Construction Costs**	$50,836,000	12,250	$4,150
2.	**General Requirements & Fee**	$8,167,000	12,250	$667
3.	**Allowances**	$4,425,000	12,250	$361
	Total	**$ 63,428,000**	**12,250**	**$5,178**

1.2 Purpose

This report is intended to provide a practical analysis of Construction costs for the construction of a new performing arts centre in Lethbridge, Alberta. All scope/cost item exceptions are listed in Exclusions below.

1.3 Methodology

Where possible, elements have been assessed or measured and priced at rates considered competitive for a project of this type.

Cost plans, cost checks and cost analysis are measured in accordance with the latest issue of "Elemental Cost Analysis - Method of Measurement and Pricing", published by the Canadian Institute of Quantity Surveyors and complied in accordance with "Uniformat, A Uniformat Classification of Construction Systems and Assemblies", published by The Construction Specification Institute.

1.4 Exclusions

This analysis excludes the following:

a. GST
b. Consultant Fees and disbursements
c. Independent testing (including air monitoring)
d. Removal contaminated soils
e. Premium time working
f. Price escalation after April 2010

2. DOCUMENTATION

This report has been prepared from the following documentation:

Ferrari Westwood Babits Architects

PAC Basement Floor Plan
PAC Main Floor Plan
PAC Second Floor Plan
PAC Third Floor Plan

Electrical Design Report Dated February 2, 2010
Mechanical Planning Report Dated March 1, 2010
Structural Planning Report Dated March 2, 2010
Theatre Equipment Narrative by Theatre Projects Dated February 26, 2010
Theatre Equipment Narrative - Heat Guidelines Dated February 26, 2010
Theatre Equipment Narrative – Structural guidelines Dated February 26, 2010
Theatre Equipment Narrative – Electrical guidelines Dated February 26, 2010

The above documentation was supplemented with information gathered by telephone conversations and meetings.

3. COSTING

3.1 Cost Base:

All costs are expressed in current **April 2010** dollars, that is, as if the project were tendered in **April 2010**. Recently tendered projects have demonstrated higher volumes of sub-trade interest resulting in more competition and better value.

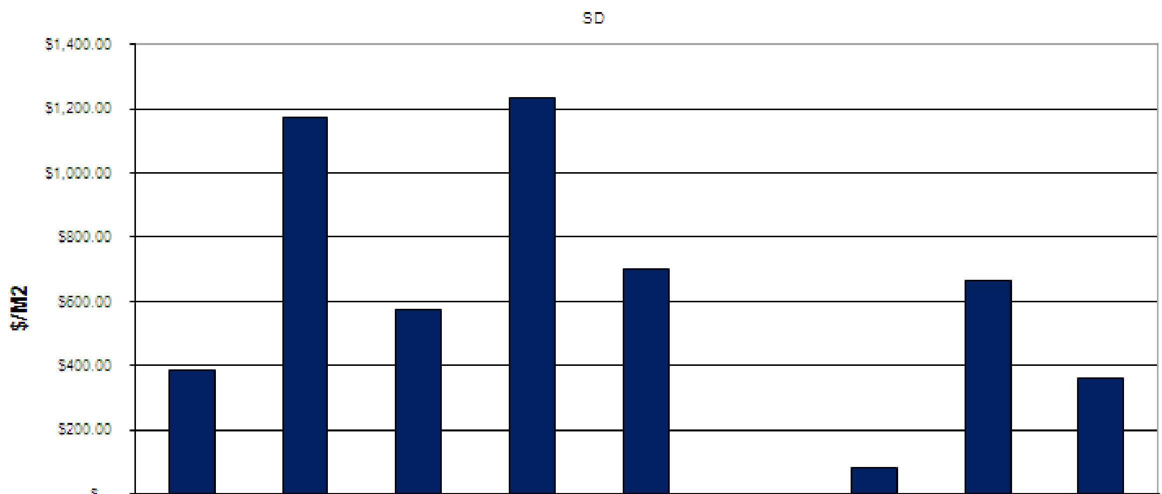
3.2 Contingencies:

Allowance(s) have been included to cover:

1. design contingency 7.5 %
2. construction change order 0.0 %

4. COST SUMMARY

4.1 Elemental Unit Cost $/m²:



	SUBSTRUCTURE	SHELL	INTERIORS	SERVICES	EQUIPMENT AND FURNISHINGS	SPECIAL CONSTRUCTION & DEMOLITION	BUILDING SITEWORK	GENERAL REQUIREMENTS	CONTINGENCIES
SD	$384.83	$1,170.92	$574.46	$1,235.63	$702.36	$-	$81.63	$666.70	$361.24

5. GROSS FLOOR AREA

5.1 GROSS FLOOR AREA (GFA):

Building areas and volumes are measured in accordance with the latest issue of "Measurement of Buildings by Area and Volume", issued by the Canadian Institute of Quantity Surveyors.

Description	m²
Basement Plan	
• Mechanical/Services	1,100
• Mech. Pit	75
• CW1 Storage	100
• Orchestra Pit	65
Main Floor Plan	
• Main Floor	4,410
• Theatre	675
• Stage	575
Second Floor Plan	
• 2nd Floor	2,525
• Theatre Balcony	300
• Rehearsal Balcony	110
Third Floor Plan	
• 3rd Floor	1,925
• Theatre Balcony	400
Total GFA	**12,250**

6.0 Elemental Construction Cost Summary

Uniformat Elemental Cost Summary

Project : Lethbridge Performing Arts Centre
GFA : 12,250 m^2
Date : April 2010
Location : Lethbridge, Alberta
Report Status : Schematic Design

ELEMENT	Ratio to GFA	Elemental Costs Quantity		Elemental Costs Unit Rate	Elemental Amounts Sub-Total	Elemental Amounts Total	Rate per GFA Sub-Total	Rate per GFA Total	% Total
A SUBSTRUCTURE						**$ 4,714,182**		**$ 384.83**	**7.43**
A10 Foundations						**2,133,992**		**174.20**	**3.36**
A1010 Standard Foundations	0.46	5,660	m^2	298.98	1,692,212		138.14		
A1020 Special Foundations	-	-		-	-		-		
A1030 Slab on Grade	0.36	4,410	m^2	100.18	441,780		36.06		
A20 Basement Construction						**2,580,190**		**210.63**	**4.07**
A2010 Basement Excavation	0.77	9,480	m^2	64.84	614,728		50.18		
A2020 Basement Walls	0.33	4,020	m^2	488.92	1,965,462		160.45		
B SHELL						**$ 14,343,741**		**$ 1,170.92**	**22.61**
B10 Superstructure						**9,128,668**		**745.20**	**14.39**
B1010 Floor Construction	0.43	5,210	m^2	813.41	4,237,851		345.95		
B1020 Roof Construction	0.49	5,960	m^2	820.61	4,890,817		399.25		
B20 Exterior Enclosures						**4,027,674**		**328.79**	**6.35**
B2010 Exterior Walls	0.36	4,369	m^2	352.68	1,540,861		125.78		
B2020 Exterior Windows	0.13	1,622	m^2	1,482.42	2,404,479		196.28		
B2030 Exterior Doors	0.00	41	No.	2,008.15	82,334		6.72		
B30 Roofing						**1,187,399**		**96.93**	**1.87**
B3010 Roof Coverings	0.51	6,285	m^2	149.15	937,399		76.52		
B3030 Balconies and Projections	0.04	500	m^2	500.00	250,000		20.41		
C INTERIORS						**$ 7,037,149**		**$ 574.46**	**11.09**
C10 Interior Construction						**2,799,850**		**228.56**	**4.41**
C1010 Partitions	1.17	14,345	m^2	111.85	1,604,437		130.97		
C1020 Interior Doors	0.02	201	lvs	3,195.77	642,349		52.44		
C1030 Fittings	1.10	13,450	m^2	41.12	553,064		45.15		
C20 Stairs						**380,691**		**31.08**	**0.60**
C2010 Stair Construction	0.00	20	flt	19,034.55	380,691		31.08		
C30 Interior Finishes						**3,856,608**		**314.83**	**6.08**
C3010 Wall Finishes	2.31	28,323	m^2	36.41	1,031,169		84.18		
C3020 Floor Finishes	1.00	12,250	m^2	83.93	1,028,140		83.93		
C3030 Ceiling Finishes	1.00	12,250	m^2	146.72	1,797,299		146.72		
D SERVICES						**$ 15,136,511**		**$ 1,235.63**	**23.86**
D10 Conveying						**399,623**		**32.62**	**0.63**
D1010 Elevators and Lifts	0.00	3	No.	133,207.67	399,623		32.62		
D20 Plumbing						**1,388,918**		**113.38**	**2.19**
D2010 Plumbing Fixtures	1.00	12,250	m^2	35.93	440,168		35.93		
D2020 Domestic Water Distribution	1.00	12,250	m^2	22.73	278,400		22.73		
D2030 Sanitary Waste	1.00	12,250	m^2	36.58	448,050		36.58		
D2040 Rain Water Drainage	1.00	12,250	m^2	11.00	134,800		11.00		
D2090 Other Plumbing Systems	1.00	12,250	m^2	7.14	87,500		7.14		
D30 Heating Ventilating and Air Conditioning (HVAC)						**6,312,910**		**515.34**	**9.95**
D3020 Heat Generation	1.00	12,250	m^2	39.47	483,546		39.47		
D3030 Refrigeration	1.00	12,250	m^2	60.97	746,895		60.97		
D3040 HVAC Distribution (Distribution Systems)	1.00	12,250	m^2	200.84	2,460,305		200.84		
D3050 Terminal and Packaged Units	1.00	12,250	m^2	141.22	1,730,004		141.22		
D3060 HVAC Instrumentation and Controls	1.00	12,250	m^2	65.00	796,250		65.00		
D3070 Testing, Adjusting, and Balancing	1.00	12,250	m^2	3.00	36,750		3.00		
D3090 Other Special HVAC Systems & Equipment	1.00	12,250	m^2	4.83	59,160		4.83		
D40 Fire Protection						**568,760**		**46.43**	**0.90**
D4010 Sprinklers	1.00	12,250	m^2	46.43	568,760		46.43		
D50 Electrical						**6,466,300**		**527.86**	**10.19**
D5010 Electrical Service and Distribution	1.00	12,250	m^2	117.96	1,445,000		117.96		
D5020 Lighting and Branch Wiring	1.00	12,250	m^2	164.08	2,010,000		164.08		
D5030 Communications and Security	1.00	12,250	m^2	231.13	2,831,300		231.13		
D5090 Other Electrical Systems	1.00	12,250	m^2	14.69	180,000		14.69		
E EQUIPMENT AND FURNISHINGS						**$ 8,603,850**		**$ 702.36**	**13.56**
E10 Equipment						**7,323,725**		**597.86**	**11.55**
E1020 Institutional Equipment	1.00	12,250	m^2	597.86	7,323,725		597.86		
E20 Furnishings						**1,280,125**		**104.50**	**2.02**
E2010 Fixed Furnishings	1.00	12,250	m^2	104.50	1,280,125		104.50		
F SPECIAL CONSTRUCTION AND DEMOLITION						**$ -**		**$ -**	**-**
F10 Special Construction						**-**		**-**	**-**
F20 Selective Building Demolition						**-**		**-**	**-**
G BUILDING SITEWORK						**$ 1,000,000**		**$ 81.63**	**1.58**
G10 Site Preparation						**35,000**		**2.86**	**0.06**
G1010 Site Clearing	1.11	13,550	m^2	2.58	35,000		2.86		
G20 Site Improvements						**814,500**		**66.49**	**1.28**
G2010 Roadways	1.00	12,250	m^2	11.39	139,500		11.39		
G2020 Parking Lots	1.00	12,250	m^2	12.24	150,000		12.24		
G2030 Pedestrian Paving	1.00	12,250	m^2	14.29	175,000		14.29		
G2040 Site Development	1.00	12,250	m^2	16.33	200,000		16.33		

Uniformat Elemental Cost Summary

Project : Lethbridge Performing Arts Centre
GFA : 12,250 m^2
Date : April 2010
Location : Lethbridge, Alberta
Report Status : Schematic Design

ELEMENT	Ratio to GFA	Elemental Costs		Elemental Amounts		Rate per GFA		% Total
		Quantity	Unit Rate	Sub-Total	Total	Sub-Total	Total	
G2050 Landscaping	1.00	12,250 m^2	12.24	150,000		12.24		
G30 Site Civil / Mechanical Utilities					**58,000**		**4.73**	**0.09**
G3020 Sanitary Sewer	1.00	12,250 m^2	2.04	25,000		2.04		
G3030 Storm Sewer	1.00	12,250 m^2	2.04	25,000		2.04		
G3090 Other Site Mechanical Utilities	1.00	12,250 m^2	0.65	8,000		0.65		
G40 Site Electrical Utilities					**92,500**		**7.55**	**0.15**
G4010 Electrical Distribution	1.00	12,250 m^2	3.27	40,000		3.27		
G4020 Site Lighting	1.00	12,250 m^2	3.43	42,000		3.43		
G4030 Site Communications & Security	1.00	12,250 m^2	0.86	10,500		0.86		
G50 Other Site Construction					**-**		**-**	**-**
NET CONSTRUCTION COST					**$ 50,835,433**		**$ 4,149.83**	**80.15**
Z GENERAL REQUIREMENTS & ALLOWANCES					**$ 8,167,119**		**$ 666.70**	**12.88**
Z10 General Requirements					**6,171,864**		**503.83**	**9.73**
Z1010 Supervision & Labour Expenses	5.2%			2,641,516		215.63		
Z1020 Temporary Conditions	4.4%			2,242,848		183.09		
Z1030 Permits, Insurance & Bonds	2.5%			1,287,500		105.10		
Z20 Fee					**1,995,255**		**162.88**	**3.15**
Z2010 Fee	3.50%			1,995,255		162.88		
ESTIMATED CONSTRUCTION COST (Excluding Allowances)					**$ 59,002,552**		**$ 4,816.53**	**93.02**
Z30 Allowances					**4,425,191**		**361.24**	**6.98**
Z3010 Design Allowance	7.5%			4,425,191		361.24		
Z3020 Cash Allowance	0.0%					-		
ESTIMATED TENDER COST (Excluding Construction Allowance)					**$ 63,427,743**		**$ 5,177.77**	**100.00**
Z3030 Construction Allowance	0.0%			-	$ -	-		
ESTIMATED CONSTRUCTION COST (Excluding GST)					**$ 63,427,743**		**$ 5,177.77**	
GST (if applicable)	0.00%				$ -		$ -	
ESTIMATED CONSTRUCTION COST (Including GST)					**$ 63,428,000**		**$ 5,177.80**	

7.0 Detailed Elemental Estimate

U1	U2	U3	Phase	Description	Takeoff Quantity	Grand Total Unit Price	Grand Total
A				**SUBSTRUCTURE**			
	A10			**Foundations**			
		A1010		**Standard Foundations**			
				R/C Column Pad Footings - Basement Level 1.2m x 1.2m			
			03-11-13.45	Forms, footings,continuous wall, plywood	173.00 m2ca	83.10	14,377
			03-21-10.60	Reinforcing, footing, #10 to #25	3.59 m tn	2,018.92	7,254
			03-31-05.35	Ready Mix Concrete, 25 mpa	57.00 m3	181.50	10,346
			03-31-05.70	Concrete placing to cntns footing, pumped, incl vibrating	57.00 m3	81.34	4,636
			31-23-16.13	Excavation, trench continuous footing, common earth	144.00 bm3	19.59	2,821
			31-23-23.13	Backfill, light soil	87.00 lm3	31.45	2,736
			31-23-23.18	Hauling borrowed material, 3km round, 2.6 loads per hr	57.00 lm3	9.82	559
				R/C Column Pad Footings- Basement Level 2m x 2m			
			03-11-13.45	Forms, footings,continuous wall, plywood	408.00 m2ca	83.10	33,905
			03-21-10.60	Reinforcing, footing, #10 to #25	14.14 mtn	2,018.92	28,542
			03-31-05.35	Ready Mix Concrete, 25 mpa	224.00 m3	181.50	40,656
			03-31-05.70	Concrete placing to cntns footing, pumped, incl vibrating	224.00 m3	81.34	18,220
			31-23-16.13	Excavation, trench continuous footing, common earth	425.00 bm3	19.59	8,326
			31-23-23.13	Backfill, light soil	201.00 lm3	31.45	6,322
			31-23-23.18	Hauling borrowed material, 3km round, 2.6 loads per hr	224.00 lm3	9.82	2,199
				R/C Column Pad Footings - Main Level 1.2m x 1.2m			
			03-11-13.45	Forms, footings,continuous wall, plywood	216.00 m2ca	83.10	17,950
			03-21-10.60	Reinforcing, footing, #10 to #25	4.49 m tn	2,018.92	9,067
			03-31-05.35	Ready Mix Concrete, 25 mpa	71.00 m3	181.50	12,887
			03-31-05.70	Concrete placing to cntns footing, pumped, incl vibrating	71.00 m3	81.34	5,775
			31-23-16.13	Excavation, trench continuous footing, common earth	180.00 bm3	19.59	3,526
			31-23-23.13	Backfill, light soil	109.00 lm3	31.45	3,428
			31-23-23.18	Hauling borrowed material, 3km round, 2.6 loads per hr	71.00 lm3	9.82	697
				R/C Column Pad Footings - Main Level 2m x 2m			
			03-11-13.45	Forms, footings,continuous wall, plywood	144.00 m2ca	83.10	11,967
			03-21-10.60	Reinforcing, footing, #10 to #25	4.99 m tn	2,018.92	10,074
			03-31-05.35	Ready Mix Concrete, 25 mpa	79.00 m3	181.50	14,339
			03-31-05.70	Concrete placing to cntns footing, pumped, incl vibrating	79.00 m3	81.34	6,426
			31-23-16.13	Excavation, trench continuous footing, common earth	150.00 bm3	19.59	2,939
			31-23-23.13	Backfill, light soil	79.00 lm3	31.45	2,485
			31-23-23.18	Hauling borrowed material, 3km round, 2.6 loads per hr	71.00 lm3	9.82	697
				R/C Column Pads - Basement Level 800mm x 800mm			
			03-11-13.45	Forms, footings,continuous wall, plywood	115.00 m2ca	83.10	9,557
			03-21-10.60	Reinforcing, footing, #10 to #25	1.73 m tn	2,018.92	3,493
			03-31-05.35	Ready Mix Concrete, 25 mpa	25.00 m3	178.20	4,455
			03-31-05.70	Concrete placing to cntns footing, pumped, incl vibrating	25.00 m3	81.34	2,033
			31-23-16.13	Excavation, trench continuous footing, common earth	29.00 bm3	19.59	568
			31-23-23.13	Backfill, light soil	3.00 lm3	31.45	94
			31-23-23.18	Hauling borrowed material, 3km round, 2.6 loads per hr	25.00 lm3	9.82	245
				R/C Column Pads - Basement Level 1200mm x 1200mm			
			03-11-13.45	Forms, footings,continuous wall, plywood	173.00 m2ca	83.10	14,377
			03-21-10.60	Reinforcing, footing, #10 to #25	5.62 m tn	2,018.92	11,350
			03-31-05.35	Ready Mix Concrete, 25 mpa	82.00 m3	178.20	14,612
			03-31-05.70	Concrete placing to cntns footing, pumped, incl vibrating	82.00 m3	81.34	6,670
			31-23-16.13	Excavation, trench continuous footing, common earth	94.00 bm3	19.59	1,842
			31-23-23.13	Backfill, light soil	11.00 lm3	31.45	346
			31-23-23.18	Hauling borrowed material, 3km round, 2.6 loads per hr	82.00 lm3	9.82	805
				R/C Column Pads - Main Level 800mm x 800mm			
			03-11-13.45	Forms, footings,continuous wall, plywood	144.00 m2ca	83.10	11,967
			03-21-10.60	Reinforcing, footing, #10 to #25	2.16 m tn	2,018.92	4,365
			03-31-05.35	Ready Mix Concrete, 25 mpa	32.00 m3	178.20	5,702
			03-31-05.70	Concrete placing to cntns footing, pumped, incl vibrating	32.00 m3	81.34	2,603
			31-23-16.13	Excavation, trench continuous footing, common earth	36.00 bm3	19.59	705
			31-23-23.13	Backfill, light soil	4.00 lm3	31.45	126
			31-23-23.18	Hauling borrowed material, 3km round, 2.6 loads per hr	32.00 lm3	9.82	314
				R/C Column Pads - Main Level 1200mm x 1200mm			
			03-11-13.45	Forms, footings,continuous wall, plywood	65.00 m2ca	83.10	5,402

U1	U2	U3	Phase	Description	Takeoff Quantity		Grand Total Unit Price	Grand Total
				R/C Column Pads - Main Level 1200mm x 1200mm				
			03-21-10.60	Reinforcing, footing, #10 to #25	2.11	m tn	2,018.92	4,256
			03-31-05.35	Ready Mix Concrete, 25 mpa	31.00	m3	178.20	5,524
			03-31-05.70	Concrete placing to cntns footing, pumped, incl vibrating	31.00	m3	81.34	2,521
			31-23-16.13	Excavation, trench continuous footing, common earth	35.00	bm3	19.59	686
			31-23-23.13	Backfill, light soil	4.00	lm3	31.45	126
			31-23-23.18	Hauling borrowed material, 3km round, 2.6 loads per hr	31.00	lm3	9.82	304
				R/C Perimeter Wall Footings - Basement 600mm				
			03-11-13.45	Forms, footings,continuous wall, plywood	126.00	m2ca	83.10	10,471
			03-21-10.60	Reinforcing, footing, #10 to #25	2.84	m tn	2,018.92	5,730
			03-31-05.35	Ready Mix Concrete, 25 mpa	42.00	m3	181.50	7,623
			03-31-05.70	Concrete placing to cntns footing, pumped, incl vibrating	42.00	m3	81.34	3,416
			31-23-16.13	Excavation, trench continuous footing, common earth	47.00	bm3	19.59	921
			31-23-23.13	Backfill, light soil	6.00	lm3	31.45	189
			31-23-23.18	Hauling borrowed material, 3km round, 2.6 loads per hr	42.00	lm3	9.82	412
				R/C Perimeter Wall Fotings - Basement Level 800mm				
			03-11-13.45	Forms, footings,continuous wall, plywood	111.00	m2ca	83.10	9,224
			03-21-10.60	Reinforcing, footing, #10 to #25	3.32	m tn	2,018.92	6,699
			03-31-05.35	Ready Mix Concrete, 25 mpa	49.00	m3	181.50	8,894
			03-31-05.70	Concrete placing to cntns footing, pumped, incl vibrating	49.00	m3	81.34	3,986
			31-23-16.13	Excavation, trench continuous footing, common earth	55.00	bm3	19.59	1,078
			31-23-23.13	Backfill, light soil	7.00	lm3	31.45	220
			31-23-23.18	Hauling borrowed material, 3km round, 2.6 loads per hr	49.00	lm3	9.82	481
				R/C Perimeter Strip Footings - Main Level 600mm				
			03-11-13.45	Forms, footings,continuous wall, plywood	257.00	m2ca	83.10	21,357
			03-21-10.60	Reinforcing, footing, #10 to #25	5.78	m tn	2,018.93	11,663
			03-31-05.35	Ready Mix Concrete, 25 mpa	85.00	m3	181.50	15,428
			03-31-05.70	Concrete placing to cntns footing, pumped, incl vibrating	85.00	m3	81.34	6,914
			31-23-16.13	Excavation, trench continuous footing, common earth	428.00	bm3	19.59	8,385
			31-23-23.13	Backfill, light soil	343.00	lm3	31.45	10,788
			31-23-23.18	Hauling borrowed material, 3km round, 2.6 loads per hr	85.00	lm3	9.82	834
				R/C Perimeter Strip Footings - Main Level 800mm				
			03-11-13.45	Forms, footings,continuous wall, plywood	91.00	m2ca	83.10	7,562
			03-21-10.60	Reinforcing, footing, #10 to #25	2.73	m tn	2,018.92	5,518
			03-31-05.35	Ready Mix Concrete, 25 mpa	40.00	m3	181.50	7,260
			03-31-05.70	Concrete placing to cntns footing, pumped, incl vibrating	40.00	m3	81.34	3,254
			31-23-16.13	Excavation, trench continuous footing, common earth	140.00	bm3	19.59	2,743
			31-23-23.13	Backfill, light soil	100.00	lm3	31.45	3,145
			31-23-23.18	Hauling borrowed material, 3km round, 2.6 loads per hr	40.00	lm3	9.82	393
				R/C Interior Wall Footings - Basement Level 600mm				
			03-11-13.45	Forms, footings,continuous wall, plywood	319.00	m2ca	83.10	26,509
			03-21-10.60	Reinforcing, footing, #10 to #25	7.17	m tn	2,018.93	14,482
			03-31-05.35	Ready Mix Concrete, 25 mpa	105.00	m3	181.50	19,058
			03-31-05.70	Concrete placing to cntns footing, pumped, incl vibrating	105.00	m3	81.34	8,540
			31-23-16.13	Excavation, trench continuous footing, common earth	119.00	bm3	19.59	2,331
			31-23-23.13	Backfill, light soil	14.00	lm3	31.45	440
			31-23-23.18	Hauling borrowed material, 3km round, 2.6 loads per hr	105.00	lm3	9.82	1,031
				R/C Interior Wall Footings - Basement Level 800mm				
			03-11-13.45	Forms, footings,continuous wall, plywood	150.00	m2ca	83.10	12,465
			03-21-10.60	Reinforcing, footing, #10 to #25	4.49	m tn	2,018.92	9,063
			03-31-05.35	Ready Mix Concrete, 25 mpa	66.00	m3	181.50	11,979
			03-31-05.70	Concrete placing to cntns footing, pumped, incl vibrating	66.00	m3	81.34	5,368
			31-23-16.13	Excavation, trench continuous footing, common earth	75.00	bm3	19.59	1,469
			31-23-23.13	Backfill, light soil	9.00	lm3	31.45	283
			31-23-23.18	Hauling borrowed material, 3km round, 2.6 loads per hr	66.00	lm3	9.82	648
				R/C Interior Wall Footings - Theatre Pit 800mm				
			03-11-13.45	Forms, footings,continuous wall, plywood	286.00	m2ca	83.10	23,767
			03-21-10.60	Reinforcing, footing, #10 to #25	8.59	m tn	2,018.92	17,341
			03-31-05.35	Ready Mix Concrete, 25 mpa	126.00	m3	181.50	22,869
			03-31-05.70	Concrete placing to cntns footing, pumped, incl vibrating	126.00	m3	81.34	10,249
			31-23-16.13	Excavation, trench continuous footing, common earth	220.00	bm3	19.59	4,310

U1	U2	U3	Phase	Description	Takeoff Quantity		Grand Total Unit Price	Grand Total
				R/C Interior Wall Footings - Theatre Pit 800mm				
			31-23-23.13	Backfill, light soil	17.00	lm3	31.45	535
			31-23-23.18	Hauling borrowed material, 3km round, 2.6 loads per hr	126.00	lm3	9.82	1,237
				R/C Interior Wall foundations - Rehearsal Pit 800mm				
			03-11-13.45	Forms, footings,continuous wall, plywood	39.00	m2ca	83.10	3,241
			03-21-10.60	Reinforcing, footing, #10 to #25	1.17	m tn	2,018.92	2,364
			03-31-05.35	Ready Mix Concrete, 25 mpa	17.00	m3	178.20	3,029
			03-31-05.70	Concrete placing to cntns footing, pumped, incl vibrating	17.00	m3	81.34	1,383
			31-23-16.13	Excavation, trench continuous footing, common earth	20.00	bm3	19.59	392
			31-23-23.13	Backfill, light soil	2.00	lm3	31.45	63
			31-23-23.18	Hauling borrowed material, 3km round, 2.6 loads per hr	17.00	lm3	9.82	167
				R/C Interior Wall Footings - Elevator 600mm				
			03-11-13.45	Forms, footings,continuous wall, plywood	52.00	m2ca	83.10	4,321
			03-21-10.60	Reinforcing, footing, #10 to #25	1.17	m tn	2,018.92	2,364
			03-31-05.35	Ready Mix Concrete, 25 mpa	17.00	m3	178.20	3,029
			03-31-05.70	Concrete placing to cntns footing, pumped, incl vibrating	17.00	m3	81.34	1,383
			31-23-16.13	Excavation, trench continuous footing, common earth	20.00	bm3	19.59	392
			31-23-23.13	Backfill, light soil	2.00	lm3	31.45	63
			31-23-23.18	Hauling borrowed material, 3km round, 2.6 loads per hr	17.00	lm3	9.82	167
				R/C Perimeter Strip Foundation - Basement Level - Elevators 400mm				
			03-11-13.45	Forms, footings,continuous wall, plywood	240.00	m2ca	83.10	19,944
			03-21-10.60	Reinforcing, footing, #10 to #25	5.27	m tn	2,018.93	10,634
			03-31-05.35	Ready Mix Concrete, 25 mpa	53.00	m3	178.20	9,445
			03-31-05.70	Concrete placing to cntns footing, pumped, incl vibrating	53.00	m3	81.34	4,311
				R/C Perimeter Strip Foundation - Main Level 400mm				
			03-11-13.45	Forms, footings,continuous wall, plywood	2,280.00	m2ca	83.10	189,471
			03-21-10.60	Reinforcing, footing, #10 to #25	50.04	m tn	2,018.92	101,017
			03-31-05.35	Ready Mix Concrete, 25 mpa	502.00	m3	178.20	89,456
			03-31-05.70	Concrete placing to cntns footing, pumped, incl vibrating	502.00	m3	81.34	40,831
				R/C Perimeter Strip Foundations - Main Level 600mm				
			03-11-13.45	Forms, footings,continuous wall, plywood	560.00	m2ca	83.10	46,537
			03-21-10.60	Reinforcing, footing, #10 to #25	18.43	m tn	2,018.92	37,217
			03-31-05.35	Ready Mix Concrete, 25 mpa	185.00	m3	178.20	32,967
			03-31-05.70	Concrete placing to cntns footing, pumped, incl vibrating	185.00	m3	81.34	15,047
				R/C Perimeter Strip Foundation - Main Level 400mm Rehearsal Pit				
			03-11-13.45	Forms, footings,continuous wall, plywood	60.00	m2ca	83.10	4,986
			03-21-10.60	Reinforcing, footing, #10 to #25	1.32	m tn	2,018.93	2,659
			03-31-05.35	Ready Mix Concrete, 25 mpa	13.00	m3	178.20	2,317
			03-31-05.70	Concrete placing to cntns footing, pumped, incl vibrating	13.00	m3	81.34	1,057
				R/C Piers/Pilasters - Main Level 400mm x 400mm				
			03-11-13.25	Forms columns square, steel framed wood	320.00	m2ca	131.62	42,119
			03-21-10.60	Reinforcing, columns, #25 to #55	11.09	m tn	1,987.55	22,038
			03-31-05.35	Ready Mix Concrete, 25 mpa	35.00	m3	178.20	6,237
			03-31-05.70	Concrete placing to column,square, pumpd,incl vibrating	35.00	m3	116.20	4,067
				R/C Piers/pilasters - Main Level 600mm x 600mm				
			03-11-13.25	Forms columns square, steel framed wood	144.00	m2ca	131.62	18,954
			03-21-10.60	Reinforcing, columns, #25 to #55	7.48	m tn	1,987.55	14,875
			03-31-05.35	Ready Mix Concrete, 25 mpa	24.00	m3	178.20	4,277
			03-31-05.70	Concrete placing to column,square, pumpd,incl vibrating	24.00	m3	116.20	2,789
				Trench Excavation				
			31-23-16.13	Excavation, trench continuous footing, common earth	1,633.00	bm3	19.59	31,993
			31-23-23.13	Backfill, light soil	1,267.00	lm3	31.45	39,848
			31-23-23.18	Hauling borrowed material, 3km round, 2.6 loads per hr	543.00	lm3	9.82	5,330
			31-23-16.13	Excavation, trench continuous footing, common earth	178.00	bm3	19.59	3,487
				Perimeter Drainage System				
			33-46-26.10	Drainage geotextiles, drainage material, 20 mm gravel fill in trench	150.00	m3	40.41	6,061
			33-46-16.30	Plastic,perforated pvc,pipe,150 diam,excludes excavation and backfill	400.00	m	32.81	13,123
			31-23-19.20	Allowance for dewatering	1.00	ls	60,000.00	60,000

U1	U2	U3	Phase	Description	Takeoff Quantity		Grand Total Unit Price	Grand Total
			05-51-19.50	Miscellaneous metals and fixings	1.00	ls	30,000.00	30,000
		A1030		Slab on Grade				
				Slab on Grade - Basement 125mm				
			31-22-16.10	Fine grade, fine grade for slab on grade, machine	1,100.00	m2	3.33	3,666
			31-23-23.17	Fill, gravel fill, compacted, under floor slabs, 150 mm deep	1,100.00	m2	9.43	10,375
			07-26-10.10	Building Paper, polyethylene vapor barrier, standard, 0.05mm thick	1,100.00	m2	3.19	3,512
			03-11-13.65	Forms, SOG, edge	247.00	m	19.76	4,881
			03-21-10.60	Reinforcing, SOG, #10 to #25	5.56	m tn	1,932.45	10,741
			03-31-05.35	Ready Mix Concrete, 30 mpa	151.00	m3	192.50	29,068
			03-31-05.70	Concrete placing to slab on grade, pumpd,incl vibrating	151.00	m3	69.72	10,527
			03-35-29.30	Concrete finishing, floors, monolithic, machine trowel finish	1,100.00	m2	10.25	11,270
				Slab on Grade - Main Level - 125mm				
			31-22-16.10	Fine grade, fine grade for slab on grade, machine	2,760.00	m2	3.33	9,198
			31-23-23.17	Fill, gravel fill, compacted, under floor slabs, 150 mm deep	2,760.00	m2	9.43	26,031
			07-26-10.10	Building Paper, polyethylene vapor barrier, standard, 0.05mm thick	2,760.00	m2	3.19	8,811
			03-11-13.65	Forms, SOG, edge	345.00	m	19.76	6,818
			03-21-10.60	Reinforcing, SOG, #10 to #25	13.95	m tn	1,932.45	26,952
			03-31-05.35	Ready Mix Concrete, 30 mpa	380.00	m3	192.50	73,150
			03-31-05.70	Concrete placing to slab on grade, pumpd,incl vibrating	380.00	m3	69.72	26,493
			03-35-29.30	Concrete finishing, floors, monolithic, machine trowel finish	2,760.00	m2	10.25	28,279
				Slab on Grade - Theatre 225mm				
			31-22-16.10	Fine grade, fine grade for slab on grade, machine	300.00	m2	3.33	1,000
			31-23-23.17	Fill, gravel fill, compacted, under floor slabs, 150 mm deep	300.00	m2	9.43	2,829
			07-26-10.10	Building Paper, polyethylene vapor barrier, standard, 0.05mm thick	300.00	m2	3.19	958
			03-11-13.65	Forms, SOG, edge	300.00	m	19.76	5,929
			03-21-10.60	Reinforcing, SOG, #10 to #25	7.28	m tn	1,932.45	14,062
			03-31-05.35	Ready Mix Concrete, 30 mpa	198.00	m3	192.50	38,115
			03-31-05.70	Concrete placing to slab on grade, pumpd,incl vibrating	198.00	m3	69.72	13,804
			03-35-29.30	Concrete finishing, floors, monolithic, machine trowel finish	300.00	m2	10.25	3,074
				Slab on Grade - Main Level Loading Dock 150mm				
			31-22-16.10	Fine grade, fine grade for slab on grade, machine	250.00	m2	3.33	833
			31-23-23.17	Fill, gravel fill, compacted, under floor slabs, 150 mm deep	250.00	m2	9.43	2,358
			07-26-10.10	Building Paper, polyethylene vapor barrier, standard, 0.05mm thick	250.00	m2	3.19	798
			03-11-13.65	Forms, SOG, edge	38.00	m	19.76	751
			03-21-10.60	Reinforcing, SOG, #10 to #25	2.17	m tn	1,932.45	4,186
			03-31-05.35	Ready Mix Concrete, 30 mpa	41.00	m3	192.50	7,893
			03-31-05.70	Concrete placing to slab on grade, pumpd,incl vibrating	41.00	m3	69.72	2,858
			03-35-29.30	Concrete finishing, floors, monolithic, machine trowel finish	250.00	m2	10.25	2,561
			05-51-19.50	Miscellaneous steel fixings - allowance	1.00	ls	50,000.01	50,000
	A20			Basement Construction				
		A2010		Basement Excavation				
				Mass Excavation				
			31-23-16.42	Excvt,bulk bank measr,1.5 m3 cpcty = 99 m3/hr,backh,hydrl,crwlr mountd	9,480.00	bm3	15.53	147,245
			31-23-23.15	Borr,slct grnl fill,.57 m3 bckt,ldng and/ sprd,frnt end ldr,whl mountd	790.00	bm3	43.73	34,549
			31-23-23.18	Hauling borrowed material, 3km round, 2.6 loads per hr	8,690.00	lm3	9.82	85,298
				Shoring & Underpinning				
			31-41-13.10	Shoring, existing building, with timber, excludes salvage allowance	800.00	m2	331.37	265,097
			31-48-13.10	Underpinning Foundations, 5 to 8 meters	180.00	m2	458.55	82,539
		A2020		Basement Walls				
				R/C Piers/Pilasters - Basement Level 400mm x 400mm				
			03-11-13.25	Forms columns square, steel framed wood	512.00	m2ca	131.62	67,390
			03-21-10.60	Reinforcing, columns, #25 to #55	17.74	m tn	1,987.55	35,261
			03-31-05.35	Ready Mix Concrete, 25 mpa	56.00	m3	178.20	9,979
			03-31-05.70	Concrete placing to column,square, pumpd,incl vibrating	56.00	m3	116.20	6,507
				R/C Piers/Pilasters - 600mm x 600mm				
			03-11-13.25	Forms columns square, steel framed wood	768.00	m2ca	131.62	101,085
			03-21-10.60	Reinforcing, columns, #25 to #55	39.92	m tn	1,987.55	79,337
			03-31-05.35	Ready Mix Concrete, 25 mpa	127.00	m3	178.20	22,631
			03-31-05.70	Concrete placing to column,square, pumpd,incl vibrating	127.00	m3	116.20	14,757

U1	U2	U3	Phase	Description	Takeoff Quantity		Grand Total Unit Price	Grand Total
				R/C Perimeter Walls - 400mm				
			03-11-13.85	Forms, wall, modular pre-fab 2.4 to 4.8	1,120.00	m2ca	95.80	107,292
			03-21-10.60	Reinforcing, walls, #10 to #25	24.58	m tn	1,853.96	45,567
			03-31-05.35	Ready Mix Concrete, 30 mpa	246.00	m3	192.50	47,355
			03-31-05.70	Concrete placing to walls, pumped, incl vibrating	246.00	m3	92.96	22,867
				R/C Perimeter Walls - 600mm				
			03-11-13.85	Forms, wall, modular pre-fab 2.4 to 4.8	680.00	m2ca	95.80	65,142
			03-21-10.60	Reinforcing, walls, #10 to #25	22.38	m tn	1,853.96	41,499
			03-31-05.35	Ready Mix Concrete, 30 mpa	224.00	m3	192.50	43,120
			03-31-05.70	Concrete placing to walls, pumped, incl vibrating	224.00	m3	92.96	20,822
				R/C Interior Walls 300mm				
			03-11-13.85	Forms, wall, modular pre-fab 2.4 to 4.8	1,960.00	m2ca	95.80	187,762
			03-21-10.60	Reinforcing, walls, #10 to #25	25.47	m tn	1,853.96	47,217
			03-31-05.35	Ready Mix Concrete, 30 mpa	323.00	m3	192.50	62,178
			03-31-05.70	Concrete placing to walls, pumped, incl vibrating	323.00	m3	92.96	30,025
				R/C Interior Walls - 600mm				
			03-11-13.85	Forms, wall, modular pre-fab 2.4 to 4.8	920.00	m2ca	95.80	88,133
			03-21-10.60	Reinforcing, walls, #10 to #25	30.28	m tn	1,853.96	56,145
			03-31-05.35	Ready Mix Concrete, 30 mpa	304.00	m3	192.50	58,520
			03-31-05.70	Concrete placing to walls, pumped, incl vibrating	304.00	m3	92.96	28,259
				R/C Interior Walls 600mm - Pit				
			03-11-13.85	Forms, wall, modular pre-fab 2.4 to 4.8	2,080.00	m2ca	95.80	199,257
			03-21-10.60	Reinforcing, walls, #10 to #25	86.49	m tn	1,853.96	160,341
			03-31-05.35	Ready Mix Concrete, 30 mpa	686.00	m3	192.50	132,055
			03-31-05.70	Concrete placing to walls, pumped, incl vibrating	686.00	m3	92.96	63,769
				Waterproofing and Damproofing P3 to P2 Level				
			07-12-13.20	Membrane Waterproofing, 13mm thick	920.00	m2	29.77	27,392
			33-46-26.10	Drng gtxtls,fabric ply bonded 3-dimnsn nylon mat,advers cndtns,10 thk	920.00	m2	9.74	8,960
			07-11-13.10	Bitumns asphalt foundtn coating,below grade damprfng,sprayed on,1 coat	920.00	m2	6.33	5,825
			07-21-13.10	Extrd plyst inslt,rigid,for walls,172kp cmprs strng,50mm thick,1.8m2./	920.00	m2	38.05	35,011
			05-51-19.50	Miscellaneous steel fixings	1.00	ls	44,000.00	44,000
B				**SHELL**				
	B10			**Superstructure**				
		B1010		**Floor Construction**				
				R/C Column - 2nd Floor 400mm x 400mm				
			03-11-13.25	Forms columns square, steel framed wood	1,316.00	m2ca	131.62	173,214
			03-21-10.60	Reinforcing, columns, #25 to #55	45.61	m tn	1,987.55	90,642
			03-31-05.35	Ready Mix Concrete, 25 mpa	145.00	m3	178.20	25,839
			03-31-05.70	Concrete placing to column,square, pumpd,incl vibrating	145.00	m3	116.20	16,849
				R/C Columns - 3rd Floor 400mm x 400mm				
			03-11-13.25	Forms columns square, steel framed wood	951.00	m2ca	131.62	125,172
			03-21-10.60	Reinforcing, columns, #25 to #55	32.94	m tn	1,987.55	65,464
			03-31-05.35	Ready Mix Concrete, 25 mpa	105.00	m3	178.20	18,711
			03-31-05.70	Concrete placing to column,square, pumpd,incl vibrating	105.00	m3	116.20	12,201
				R/C Column -Main 400mm x 400mm				
			03-11-13.25	Forms columns square, steel framed wood	704.00	m2ca	131.62	92,662
			03-21-10.60	Reinforcing, columns, #25 to #55	24.39	m tn	1,987.55	48,484
			03-31-05.35	Ready Mix Concrete, 25 mpa	77.00	m3	178.20	13,721
			03-31-05.70	Concrete placing to column,square, pumpd,incl vibrating	77.00	m3	116.20	8,947
				R/C Structural Slab - 2nd Floor 250mm				
			03-11-13.35	Forms elevated slab, flat plate 4 to 6 meter	2,525.00	m2	236.66	597,570
			03-21-10.60	Reinforcing, elevated slabs, #10 to #25	127.95	m tn	2,422.13	309,913
			03-31-05.35	Ready Mix Concrete, 30 mpa	694.00	m3	192.50	133,595
			03-31-05.70	Concrete placing to elevated slab, pumpd,incl vibrating	694.00	m3	58.10	40,320
			03-35-29.30	Concrete finishing, floors, monolithic, machine trowel finish	2,525.00	m2	10.25	25,871
				R/C Structural Slab - 3rd Floor 250mm				
			03-11-13.35	Forms elevated slab, flat plate 4 to 6 meter	1,925.00	m2	236.66	455,573
			03-21-10.60	Reinforcing, elevated slabs, #10 to #25	97.27	m tn	2,422.12	235,607

U1	U2	U3	Phase	Description	Takeoff Quantity	Grand Total Unit Price	Grand Total
				R/C Structural Slab - 3rd Floor 250mm			
			03-31-05.35	Ready Mix Concrete, 30 mpa	529.00 m3	192.50	101,833
			03-31-05.70	Concrete placing to elevated slab, pumpd,incl vibrating	529.00 m3	58.10	30,734
			03-35-29.30	Concrete finishing, floors, monolithic, machine trowel finish	1,925.00 m2	10.25	19,723
				R/C Structural Slab - Theatre Balconies 400mm Avg.			
			03-11-13.35	Forms elevated slab, flat plate 4 to 6 meter	650.00 m2	236.66	153,830
			03-11-13.35	Forms elevated slab, edge	650.00 m	76.55	49,756
			03-21-10.60	Reinforcing, elevated slabs, #10 to #25	52.55 m tn	2,422.12	127,290
			03-31-05.35	Ready Mix Concrete, 30 mpa	286.00 m3	192.50	55,055
			03-31-05.70	Concrete placing to elevated slab, pumpd,incl vibrating	286.00 m3	58.10	16,616
			03-35-29.30	Concrete finishing, floors, monolithic, machine trowel finish	650.00 m2	10.25	6,660
				R/C Structural Slab - Rehearsal Balconies 400mm Avg.			
			03-11-13.35	Forms elevated slab, flat plate 4 to 6 meter	110.00 m2	236.66	26,033
			03-11-13.35	Forms elevated slab, edge	110.00 m	76.55	8,420
			03-21-10.60	Reinforcing, elevated slabs, #10 to #25	88.94 m tn	2,422.13	215,424
			03-31-05.35	Ready Mix Concrete, 30 mpa	48.00 m3	192.50	9,240
			03-31-05.70	Concrete placing to elevated slab, pumpd,incl vibrating	48.00 m3	58.10	2,789
			03-35-29.30	Concrete finishing, floors, monolithic, machine trowel finish	110.00 m2	10.25	1,127
				R/C Structural Slab - Main Floor 250mm			
			03-11-13.35	Forms elevated slab, flat plate 4 to 6 meter	1,100.00 m2	236.66	260,328
			03-21-10.60	Reinforcing, elevated slabs, #10 to #25	55.58 m tn	2,422.12	134,631
			03-31-05.35	Ready Mix Concrete, 30 mpa	303.00 m3	192.50	58,328
			03-31-05.70	Concrete placing to elevated slab, pumpd,incl vibrating	303.00 m3	58.10	17,604
			03-35-29.30	Concrete finishing, floors, monolithic, machine trowel finish	1,100.00 m2	10.25	11,270
				R/C Structural Slab - Theatre Suspended - 400mm Avg.			
			03-11-13.35	Forms elevated slab, flat plate 4 to 6 meter	300.00 m2	236.66	70,998
			03-11-13.35	Forms elevated slab, edge	300.00 m	76.55	22,964
			03-21-10.60	Reinforcing, elevated slabs, #10 to #25	24.26 m tn	2,422.13	58,749
			03-31-05.35	Ready Mix Concrete, 30 mpa	132.00 m3	192.50	25,410
			03-31-05.70	Concrete placing to elevated slab, pumpd,incl vibrating	132.00 m3	58.10	7,669
			03-35-29.30	Concrete finishing, floors, monolithic, machine trowel finish	300.00 m2	10.25	3,074
				R/C Structural Slab - Stage Suspended - 250mm			
			03-11-13.35	Forms elevated slab, flat plate 4 to 6 meter	575.00 m2	236.66	136,080
			03-21-10.60	Reinforcing, elevated slabs, #10 to #25	29.06 m tn	2,422.12	70,375
			03-31-05.35	Ready Mix Concrete, 30 mpa	158.00 m3	192.50	30,415
			03-31-05.70	Concrete placing to elevated slab, pumpd,incl vibrating	158.00 m3	58.10	9,180
			03-35-29.30	Concrete finishing, floors, monolithic, machine trowel finish	575.00 m2	10.25	5,891
		B1020		**Roof Construction**			
				R/C Theatre Walls - 300mm			
			03-11-13.85	Forms, wall, modular pre-fab 2.4 to 4.8	6,176.00 m2ca	95.80	591,641
			03-21-10.60	Reinforcing, walls, #10 to #25	101.65 m tn	1,853.96	188,453
			03-31-05.35	Ready Mix Concrete, 30 mpa	1,019.00 m3	192.50	196,158
			03-31-05.70	Concrete placing to walls, pumped, incl vibrating	1,019.00 m3	92.96	94,723
				R/C Upper Stage Walls - 300mm			
			03-11-13.85	Forms, wall, modular pre-fab 2.4 to 4.8	1,546.00 m2ca	95.80	148,102
			03-21-10.60	Reinforcing, walls, #10 to #25	25.45 m tn	1,853.96	47,174
			03-31-05.35	Ready Mix Concrete, 30 mpa	255.00 m3	192.50	49,088
			03-31-05.70	Concrete placing to walls, pumped, incl vibrating	255.00 m3	92.96	23,704
				R/C rehearsal Walls -300mm			
			03-11-13.85	Forms, wall, modular pre-fab 2.4 to 4.8	2,468.00 m2ca	95.80	236,427
			03-21-10.60	Reinforcing, walls, #10 to #25	40.62 m tn	1,853.96	75,302
			03-31-05.35	Ready Mix Concrete, 30 mpa	407.00 m3	192.50	78,348
			03-31-05.70	Concrete placing to walls, pumped, incl vibrating	407.00 m3	92.96	37,834
				R/C Stairwell Walls - 200mm			
			03-11-13.85	Forms, wall, modular pre-fab 2.4 to 4.8	1,097.00 m2ca	95.80	105,089
			03-21-10.60	Reinforcing, walls, #10 to #25	12.04 m tn	1,853.96	22,312
			03-31-05.35	Ready Mix Concrete, 30 mpa	121.00 m3	192.50	23,293
			03-31-05.70	Concrete placing to walls, pumped, incl vibrating	121.00 m3	92.96	11,248
				R/C Elevator Walls - 250mm			
			03-11-13.85	Forms, wall, modular pre-fab 2.4 to 4.8	1,097.00 m2ca	95.80	105,089
			03-21-10.60	Reinforcing, walls, #10 to #25	15.04 m tn	1,853.96	27,889

U1	U2	U3	Phase	Description	Takeoff Quantity		Grand Total Unit Price	Grand Total
				R/C Elevator Walls - 250mm				
			03-31-05.35	Ready Mix Concrete, 30 mpa	151.00	m3	192.50	29,068
			03-31-05.70	Concrete placing to walls, pumped, incl vibrating	151.00	m3	92.96	14,037
				R/C Column - Main Floor 400 x 400				
			03-11-13.25	Forms columns square, steel framed wood	704.00	m2ca	131.62	92,662
			03-21-10.60	Reinforcing, columns, #25 to #55	24.39	m tn	1,987.55	48,484
			03-31-05.35	Ready Mix Concrete, 25 mpa	77.00	m3	178.20	13,721
			03-31-05.70	Concrete placing to column,square, pumpd,incl vibrating	77.00	m3	116.20	8,947
				R/C Structural Slab - Main Floor 250mm				
			03-11-13.35	Forms elevated slab, flat plate 4 to 6 meter	1,100.00	m2	298.39	328,230
			03-21-10.60	Reinforcing, elevated slabs, #10 to #25	55.58	m tn	2,422.13	134,631
			03-31-05.35	Ready Mix Concrete, 30 mpa	303.00	m3	192.50	58,328
			03-31-05.70	Concrete placing to elevated slab, pumpd,incl vibrating	303.00	m3	81.34	24,645
			03-35-29.30	Concrete finishing, floors, monolithic, machine trowel finish	1,100.00	m2	10.25	11,270
				R/C Structural Slab - Theatre Suspended - Avg. 400mm				
			03-11-13.35	Forms elevated slab, flat plate 4 to 6 meter	300.00	m2	236.66	70,998
			03-11-13.35	Forms elevated slab, edge	300.00	m	76.55	22,964
			03-21-10.60	Reinforcing, elevated slabs, #10 to #25	24.26	m tn	2,422.13	58,749
			03-31-05.35	Ready Mix Concrete, 30 mpa	132.00	m3	192.50	25,410
			03-31-05.70	Concrete placing to elevated slab, pumpd,incl vibrating	132.00	m3	58.10	7,669
			03-35-29.30	Concrete finishing, floors, monolithic, machine trowel finish	300.00	m2	10.25	3,074
				R/C Structural Slab - Stage Suspended - 250mm				
			03-11-13.35	Forms elevated slab, flat plate 4 to 6 meter	575.00	m2	236.66	136,080
			03-21-10.60	Reinforcing, elevated slabs, #10 to #25	29.06	m tn	2,422.12	70,375
			03-31-05.35	Ready Mix Concrete, 30 mpa	158.00	m3	192.50	30,415
			03-31-05.70	Concrete placing to elevated slab, pumpd,incl vibrating	158.00	m3	58.10	9,180
			03-35-29.30	Concrete finishing, floors, monolithic, machine trowel finish	575.00	m2	10.25	5,891
				Structural Steel Composite Roof				
			05-12-23.17	Col,strt,2-tier,W Shape, a992 steel,incl shop primr,splice plates,bolts	8,654.00	kg	4.23	36,634
			05-12-23.75	Structural steel, W Shape,a992 steel,shop fab,incl shop primer,bolted connection	25,962.00	kg	4.91	127,402
			05-21-19.10	OWSJ K series, span to 10 to 15m, horizontal bridging, avg	129.81	m tn	3,135.60	407,039
			05-12-23.40	Angle frmng,strt steel,100 and larger,field fbrctd,incl cuttng&welding	21,635.00	kg	9.25	200,228
			05-31-23.50	Metal decking,steel,open type,wide rib,galvanized,over 4650 m2,38 d,18	4,121.00	m2	25.24	103,997
			07-81-16.10	Cementits fireprfng,sprayed mineral fiber cementious for fireproofing	4,121.00	m2	3.29	13,542
				Structural Steel Composite Roof - Theatre				
			05-12-23.17	Col,strt,2-tier,W Shape, a992 steel,incl shop primr,splice plates,bolts	1,260.00	kg	4.23	5,334
			05-12-23.75	Structural steel, W Shape,a992 steel,shop fab,incl shop primer,bolted connection	3,780.00	kg	4.91	18,549
			05-12-23.40	Angle frmng,strt steel,100 and larger,field fbrctd,incl cuttng&welding	3,150.00	kg	9.25	29,153
			05-31-23.50	Metal decking,steel,open type,wide rib,galvanized,over 4650 m2,38 d,18	600.00	m2	25.24	15,141
			07-81-16.10	Cementits fireprfng,sprayed mineral fiber cementious for fireproofing	600.00	m2	3.29	1,972
			05-12-23.17	Beams/Girders	25,200.00	kgs	7.00	176,410
				Structural Steel Composite Roof - Stage				
			05-12-23.17	Col,strt,2-tier,W Shape, a992 steel,incl shop primr,splice plates,bolts	1,208.00	kg	4.23	5,114
			05-12-23.75	Structural steel, W Shape,a992 steel,shop fab,incl shop primer,bolted connection	3,623.00	kg	4.91	17,779
			05-12-23.40	Angle frmng,strt steel,100 and larger,field fbrctd,incl cuttng&welding	3,019.00	kg	9.25	27,940
			05-31-23.50	Metal decking,steel,open type,wide rib,galvanized,over 4650 m2,38 d,18	575.00	m2	25.24	14,511
			07-81-16.10	Cementits fireprfng,sprayed mineral fiber cementious for fireproofing	575.00	m2	3.29	1,889
			05-12-23.17	Beams/Girders	33,206.00	kgs	7.00	232,455
				Structural Steel Composite Roof - Rehearsal				
			05-12-23.17	Col,strt,2-tier,W Shape, a992 steel,incl shop primr,splice plates,bolts	966.00	kg	4.23	4,089
			05-12-23.75	Structural steel, W Shape,a992 steel,shop fab,incl shop primer,bolted connection	2,898.00	kg	4.91	14,221
			05-12-23.40	Angle frmng,strt steel,100 and larger,field fbrctd,incl cuttng&welding	2,415.00	kg	9.25	22,350
			05-31-23.50	Metal decking,steel,open type,wide rib,galvanized,over 4650 m2,38 d,18	460.00	m2	25.24	11,608
			07-81-16.10	Cementits fireprfng,sprayed mineral fiber cementious for fireproofing	460.00	m2	3.29	1,512
			05-12-23.17	Beams/Girders	19,320.00	kgs	7.00	135,248
	B20			**Exterior Enclosure**				
		B2010		**Exterior Walls**				

U1	U2	U3	Phase	Description	Takeoff Quantity	Grand Total Unit Price	Grand Total
				Masonry Veneer w/ Steel Stud Backup			
			09-22-16.13	Metal Stud nn-lb brn,glv,3000 h,20g, 152 wd,0.53 thk,400 oc, inc top&bot trck	1,734.00 m2	33.29	57,731
			06-16-36.10	18mm CDX plwood sheathing, on walls	1,734.00 m2	15.64	27,122
			07-21-13.10	Wall insulation,rigid,fiberglass,unfaced,50mm thick,1.5m2.k/w,96kg/m3	1,734.00 m2	30.43	52,767
			07-26-10.10	Mod bit, Thermofusible Grade, Air/Vapour Membrane 2.5mm	1,734.00 m2	26.95	46,731
			09-29-10.30	Drywall,walls,16 thick	1,734.00 m2	17.28	29,968
			04-21-13.13	Brick veneer standard, rowlock course, 100 x 70 x 200 (145 per m2)	1,734.00 m2	254.49	441,288
				Brick Veneer w/ Masonry Backup			
			04-22-10.14	Cmu(bunwtjos17m200x200x400mimr an hr jn rn ev ot cr,ex sc,vr rn an grt	950.00 m2	198.13	188,220
			07-21-13.10	Wall insulation,rigid,fiberglass,unfaced,50mm thick,1.5m2.k/w,96kg/m3	950.00 m2	30.43	28,909
			07-26-10.10	Mod bit, Thermofusible Grade, Air/Vapour Membrane 2.5mm	950.00 m2	26.95	25,603
			04-21-13.13	Brick veneer standard, rowlock course, 100 x 70 x 200 (145 per m2)	950.00 m2	254.49	241,767
				Brick Veneer w/ Concrete Backp			
			07-21-13.10	Wall insulation,rigid,fiberglass,unfaced,50mm thick,1.5m2.k/w,96kg/m3	1,285.00 m2	30.43	39,103
			07-26-10.10	Mod bit, Thermofusible Grade, Air/Vapour Membrane 2.5mm	1,285.00 m2	26.95	34,631
			04-21-13.13	Brick veneer standard, rowlock course, 100 x 70 x 200 (145 per m2)	1,285.00 m2	254.49	327,021
		B2020		**Exterior Windows**			
			08-44-13.10	Curtain Wall, aluminum, stock, Triple glazed, incl. glazing, average	1,643.00 m2	1,316.14	2,162,417
			08-51-13.20	Aluminium windows, trpl glazed	245.00 m2	988.01	242,062
		B2030		**Exterior Doors**			
				Single H.M.Insulatd Dr./Frame/Hardware			
			08-13-13.13	Doors,commrc,steel,insulated,full panel,1.2 mm,914 x 2134 x 44 thick	2.00 ea	479.80	960
			08-12-13.25	Dr frm,stl chn wth anc and bar stp,150 ch@ 12 kg/,915 x 2135 dr,wgh 68	2.00 ea	360.21	720
			08-71-20.15	Door hardware,school,single,exterior,incl lever,excl panic device	2.00 door	467.50	935
			08-71-25.10	Wthrstr,doors,metal frame,extrudd sectns,aluminum,for 900 x 2135 door	2.00 opng	255.65	511
				Double H.M.Insulatd Dr./Frame/Hardware			
			08-13-13.13	Doors,commrc,steel,insulated,full panel,1.2 mm,914 x 2134 x 44 thick	6.00 ea	479.79	2,879
			08-12-13.25	Dfrm,stl chn wth anc and bar stp,200 ch@ 17 kg/,1830 x 2440 dr,wgh 125	3.00 ea	600.36	1,801
			08-71-20.15	Door hardware,school,single,exterior,incl lever,excl panic device	6.00 door	467.50	2,805
			08-71-25.10	Wthrstr,doors,metal frame,extrudd sectns,aluminum,for 900 x 2135 door	6.00 opng	255.65	1,534
				Anod. Alum. Dr./Frame/Hardware			
			08-42-26.10	Doors,glass,swing,tempered,12.7 thick,914 x 2134 opening,incl hardware	18.00 opng	3,220.20	57,964
			08-33-13.10	Drs,spclt,clng,cntr,manl,almnm, 2.7 high,2.4 lg,incl frame and hardwr	3.00 opng	4,075.25	12,226
	B30			**Roofing**			
		B3010		**Roof Coverings**			
				SBS Roofing			
			07-52-13.10	Modifd bitumen roofing,base sheet	5,881.00 m2	26.13	153,689
			07-52-13.10	Mdfd btmn rfng,app modfd,smth surfc cap sheet,plyst rnfrc,4.3mm,torchd	5,881.00 m2	43.54	256,084
			07-52-13.10	Modifd bitumen roofing,app modifd,smooth surface flashing,4mm,torched	5,881.00 m2	35.74	210,184
			07-22-16.10	Roof Deck Insulation, fiberboard high density, 25mm thick, 0.44m2.K/W	5,881.00 m2	12.39	72,837
			07-22-16.10	Roof deck inslt,extrd plyst,100mm thick,3.5m2./,276 kpa cmprss strngth	5,881.00 m2	25.15	147,918
			07-26-10.10	Building Paper, roof deck vapor barrier, for all other decks	5,881.00 m2	2.96	17,394
			09-29-10.30	Drywall, on ceilings, water resistant, 13 mm thick, incl. no finish	5,881.00 m2	13.48	79,293
		B3030		**Balconies and Projections**			
			05-12-23.05	Allowance for canopies	1.00 ls	250,000.00	250,000
C				**INTERIORS**			
	C10			**Interior Construction**			
		C1010		**Partitions**			
				190mm Concrete Block			
			04-22-10.14	Cmu(bunwtjos17m200x200x400mimr an hr jn rn ev ot cr,ex sc,vr rn an grt	3,750.00 m2	198.13	742,974
			01-54-23.70	Scaffolding building exterior face	1,875.00 m2	22.72	42,605
				Steel Stud Partition w/ 16mm Drywall			
			09-22-16.13	Metal Stud nn-lb brn,glv,3000 h,25g, 152 wd,0.53 thk,400 oc, inc top&bot trck	4,875.00 m2	26.39	128,648
			07-21-16.20	Fbrg insl,unfc,batt blnkt for walls clngs,150mm thick,3.3m2./,375mm wd	4,875.00 m2	12.91	62,941

U1	U2	U3	Phase	Description	Takeoff Quantity	Grand Total Unit Price	Grand Total
				Steel Stud Partition w/ 16mm Drywall			
			09-29-10.30	Drywall,walls,16 thick	9,750.00 m2	17.28	168,505
				Furring Partition			
			09-22-13.13	Furring, walls, on steel, galv., 41 mm channels, 300 mm O.C.	5,720.00 m2	24.36	139,364
			09-29-10.30	Drywall,walls,16 thick	5,720.00 m2	17.28	98,856
			06-11-10.26	Bocking and rough carpentry	12,250.00 m2	10.26	125,643
			07-84-13.10	Firestopping	12,250.00 m2	7.75	94,899
		C1020		Interior Doors			
				Anod. Alum. Dr./Frame/Hardware			
			08-42-26.10	Doors,glass,swing,tempered,12.7 thick,914 x 2134 opening,incl hardware	18.00 opng	3,220.20	57,964
				Hollow Metal Dr			
			08-13-13.13	Commrc steel door,flush,full panel,half glass,35 mm,1.2 mm,914 x 2134	20.00 ea	528.17	10,563
			08-12-13.25	Dr frm,stl chn wth anc and bar stp,150 ch@ 12 kg/,915 x 2135 dr,wgh 68	20.00 ea	360.21	7,204
			08-71-20.15	Door hardware, school, stairway, single, interior	20.00 door	781.00	15,620
				Wood Doors			
			08-14-16.09	Doors,wood,exterior,flush,solid wood stave core birch,914 x 2134 x 44	120.00 ea	613.61	73,634
			08-12-13.25	Dr frm,stl chn wth anc and bar stp,150 ch@ 12 kg/,915 x 2135 dr,wgh 68	120.00 ea	360.21	43,225
			08-81-10.10	Float Glass, tempered, clear, 6 mm thick	20.00 m2	161.94	3,239
			08-71-20.31	Door hardware, door closer, rack and pinion	120.00 ea	212.35	25,482
			08-71-20.40	Door hrdw,lcks,hvy duty,cyln,with sctn trim,keyd,sngl cyln fnct,commnc	120.00 ea	285.32	34,238
			08-71-20.50	Door hardware, doorstops, holder and bumper, for floor, aluminum	120.00 ea	18.63	2,235
			08-71-20.90	Door hardwr,hinges,full mortis,averag frqncy,brass base,us10,152 x 152	180.00 pr	121.00	21,780
			08-71-20.95	Door hardwr,kick plate,aluminum,with 3 beveled edges,1.27 x 254 x 864	120.00 ea	53.45	6,414
				Acoustic Doors			
			08-34-73.10	Doors,acoustical,steel,52 stc rating,914 x 2134 mm,incl framed seals	60.00 ea	3,890.43	233,426
			08-71-20.35	Door hardwr,panic device,for rim locks,single door,outsid key and pull	60.00 ea	551.94	33,116
			08-33-16.10	Grl,spc,clng,almn,manl,mill fnsh,top clng,1829 high,3658 lg,incl frame	5.00 opng	5,540.30	27,702
			09-91-23.35	Pnts&ctng,int latex,doors,flush,both sides,spray,primr,incl frame&trim	200.00 ea	61.21	12,242
			08-34-73.10	Acoustical stage doors	2.00 ea	17,132.50	34,265
		C1030		Fittings			
				Bathroom Accessories			
			10-28-13.13	Toilet Accessories, grab bars, straight, stainless steel, 914 mm long	16.00 ea	47.51	760
			10-28-13.13	Toilet accessories,hand dryer,surface mounted,electric,110 volt,20 amp	6.00 ea	672.05	4,032
			10-28-13.13	Toilet accessories, mirror, 1829 x 610 mm, with ss 19 mm square frame	30.00 ea	400.37	12,011
			10-28-13.13	Toilet Accessories, robe hook, heavy duty, concealed mounting	76.00 ea	26.96	2,049
			10-28-13.13	Toilet Accessories, soap dispenser, chrome, surface mounted, liquid	40.00 ea	77.76	3,110
			10-28-13.13	Toilt accss,toilt tissue dspnsr,stnlss steel,surfac mountd,double roll	76.00 ea	38.38	2,917
			10-28-13.13	Toilet accessrs,towel dispenser,stainless steel,flush mounted,recessed	10.00 ea	324.92	3,249
			10-28-13.13	Toilet accessories,waste receptacle,stainless steel,w/top,136 liters	10.00 ea	608.28	6,083
			10-28-13.13	Toilet Accessories, sanitary napkin dispenser recessed	40.00 ea	754.15	30,166
				Whiteboards/Tackboards			
			10-11-13.13	Whiteboard	25.00 ea	758.81	18,970
			10-11-23.10	Tack boards, prefabricated, wood frame, 6 cork, 1219 mm x 1219 mm	50.00 ea	197.97	9,899
				Washroom Partitions			
			10-21-13.13	Partitions, toilet, cubicles, ceiling hung, stainless steel	76.00 ea	1,586.10	120,544
			10-21-13.13	Entranc screens,toilet,urinal screen,ceiling braced,stnlss steel,457 w	16.00 ea	710.55	11,369
			05-73-23.50	Railings to balconies and lobbies	256.00 m	687.50	176,000
			10-26-16.10	Wallguard, crash rail, vinyl cover, aluminum retainer, 25 mm x 102 mm	325.00 m	57.14	18,571
			10-26-16.10	Wallgr,hndrl/,vinyl cover,alumnm retainr,bracket mounted,flat rail,165	325.00 m	102.56	33,333
			10-14-19.10	Allowance for signage	1.00 ls	100,000.00	100,000
	C20			Stairs			
		C2010		Stair Construction			
			05-51-16.50	Control room access	4.00 flts	12,500.00	50,000
			05-51-16.50	Stage Stairs	1.00 flts	15,000.00	15,000
			05-51-16.50	Metal filled concrete pan	12.00 flts	18,899.30	226,792
			05-51-16.50	Stair to rehearsal balcony	1.00 flts	18,899.10	18,899

U1	U2	U3	Phase	Description	Takeoff Quantity	Grand Total Unit Price	Grand Total
			05-51-16.50	Lobby Stairs	2.00 flts	35,000.00	70,000
	C30			**Interior Finishes**			
		C3010		**Wall Finishes**			
				Wall Finishes			
			09-91-23.72	Pnts&ctng,wall&clng,intr,cncr,dryw plst,oil base,3 cts,smth fnsh,spray	20,004.00 m2	9.67	193,478
			09-30-13.10	Ceramic tile, walls, interior, thin set, 150 mm x 150 mm	1,025.00 m2	74.48	76,340
			09-72-23.10	Wall cvrngs,wallppr,quality wrkmnsh,$50 p/doubl roll paper,incl sizing	4,500.00 m2	35.29	158,784
			09-77-33.10	Finish to theatre walls	1,826.00 m2	249.99	456,485
			09-77-33.10	Finish to rehearsal hall walls	968.00 m2	150.91	146,082
		C3020		**Floor Finishes**			
				Floor Finishes			
			09-65-16.10	Resilient Flooring, vinyl sheet goods, backed, 2 mm thick	1,250.00 m2	49.96	62,454
			09-65-16.10	Resilient Flooring, vinyl sheet goods, non-slip	430.00 m2	94.90	40,808
			09-68-16.10	Crpt,comm grds,drct cemnt,nylon,level loop,1133 gram,medm heavy traffc	8,070.00 m2	66.64	537,809
			04-43-10.60	Marble flooring,polished tiles,thin set,305 x 305 x 10 thick,average	1,400.00 m2	262.68	367,746
			03-35-29.30	Concrete finishng,floor,hardener,metallic,heavy service,4.88 kg/m2,add	1,100.00 m2	17.57	19,324
		C3030		**Ceiling Finishes**			
				Ceiling Finishes			
			09-51-23.30	Suspended ceiling complete,pl fc,of,600 x 1200 x 19 mm,in st ss sy,ex 40 cr chn	4,794.00 m2	64.63	309,826
			09-29-10.10	Clng,gyps dryw,mold rstn,fnsh,scrw grid,chnnl jsts,over 8'hgh,16 thick	3,888.00 m2	85.74	333,369
			09-91-23.72	Pnts&ctng,wall&clng,intr,cncr,dryw plst,oil base,3 cts,smth fnsh,spray	3,888.00 m2	9.67	37,605
			09-29-10.10	Drywall Bulkheads	1.00 ls	550,000.00	550,000
			09-84-36.10	Adjustable acoustics to theatre	1.00 ls	385,000.00	385,000
			09-84-36.10	Adjustable acoustics to Recital hall	1.00 ls	82,500.00	82,500
			09-29-10.10	Ceiling finish to theatre	600.00 m2	165.00	99,000
D				**SERVICES**			
	D10			**Conveying**			
		D1010		**Elevatros and Lifts**			
			14-21-23.10	Elvtrs,hydraulic passenger,base unit,std finish,907 kg,1.01 m/s,4 stop	2.00 ea	143,425.75	286,851
			14-21-23.10	Elvrs, hydraulic service	1.00 ea	112,772.00	112,772
	D20			**Plumbing**			
		D2010		**Plumbing Fixtures**			
			22-42-13.30	Plumbing Fixtures	1.00 ls	440,168.00	440,168
		D2020		**Domestic Water Distribution**			
			22-11-13.23	Domestic Water Distribution	1.00 ls	278,400.00	278,400
		D2030		**Sanitary Waste**			
			22-13-16.20	Sanitary Waste	1.00 ls	448,050.00	448,050
		D2040		**Rain Water Drainage**			
			22-13-19.13	Rain Water Drainage	1.00 ls	134,800.00	134,800
		D2090		**Other Plumbing Systems**			
			23-21-23.13	Other Plumbing Systems	1.00 ls	87,500.00	87,500
	D30			**HVAC**			
		D3020		**Heat Generation**			
			23-42-13.10	Heat Generation	1.00 ls	483,546.00	483,546
		D3030		**Refrigeration**			
			23-64-16.10	Refrigeration	1.00 ls	746,895.00	746,895

U1	U2	U3	Phase	Description	Takeoff Quantity	Grand Total Unit Price	Grand Total
		D3040		HVAC Distribution			
			23-31-13.13	HVAC Distribution	1.00 ls	2,460,305.00	2,460,305
		D3050		Terminal and Packaged Units			
			23-81-13.10	Terminal and Packaged Units	1.00 ls	1,730,004.00	1,730,004
		D3060		HVAC Instrumentation and Controls			
			23-09-43.10	HVAC Instrumentation & Controls	1.00 ls	796,250.00	796,250
		D3070		Testing, Adjusting, and Balancing			
			23-05-93.10	Testing, Adjusting and Balancing	1.00 ls	36,750.00	36,750
		D3090		Other Special HVAC Systems			
			23-81-43.10	Other Special HVAC	1.00 ls	59,160.00	59,160
	D40			Fire Protection			
		D4030		Fire Protection Specialities			
			21-05-23.50	Fire Protection Specialties	1.00 ls	568,760.00	568,760
	D50			Electrical			
		D5010		Electrical Service and Distribution			
			26-05-05.10	Electrical Serviecs and Distribution	1.00 ls	1,445,000.00	1,445,000
		D5020		Lighting and Branch Wiring			
			26-51-13.50	Lighting and Branch Wiring	1.00 ls	2,010,000.00	2,010,000
		D5030		Communications and Security			
			27-13-23.13	Communications and Security	1.00 ls	2,831,300.00	2,831,300
		D5090		Other Electrical Systems			
			28-31-23.50	Other Electrical Systems	1.00 ls	180,000.00	180,000
E				EQUIPMENT AND FURNISHINGS			
	E10			Equipment			
		E1020		Institutional Equipment			
				Rehearsal/Recital Hall Equipment			
			11-62-16.10	Seating pit platforms	20.00 ea	4,500.00	90,000
			11-62-16.10	Theatrical rigging	1.00 ls	122,000.00	122,000
			11-62-16.10	Stage draperies	1.00 ls	28,800.00	28,800
			11-62-16.10	Loose audience seating	156.00 ea	275.00	42,900
			11-62-16.10	Telesopic seating	1.00 ls	170,000.00	170,000
				Theatre and Stage Equipment			
			11-62-16.10	Orchestra shell towers	7.00 ea	100,000.00	700,000
			11-62-16.10	Orchestra shell ceiling	2.00 ea	35,000.00	70,000
			11-62-16.10	Sound cockpit platforms	8.00 ea	4,500.00	36,000
			11-62-16.10	Theatrical rigging	1.00 ls	935,500.00	935,500
			11-62-16.10	Fire safety curtain	1.00 ls	175,000.00	175,000
			11-62-16.10	Stage draperies	1.00 ls	69,425.00	69,425
			11-62-16.10	Orchestra pit lift	1.00 ls	240,000.00	240,000
			11-62-16.10	Equalizer lift	1.00 ls	210,000.00	210,000
			11-62-16.10	Theatrical seat wagons	6.00 ea	40,000.00	240,000
			11-62-16.10	Portable dance floor	1.00 ls	14,850.00	14,850
			11-62-16.10	Fixed audience seating	1,225.00 ea	500.00	612,500
			11-62-16.10	Loose audience seating	114.00 ea	475.00	54,150
			11-62-16.10	Tower seating	28.00 ea	450.00	12,600
			11-61-33.10	Theatre dimming and controls	1.00 ls	1,800,000.00	1,800,000
			11-61-33.10	Theatre lighting and accessories	1.00 ls	1,700,000.00	1,700,000
	E20			Furnishings			

U1	U2	U3	Phase	Description	Takeoff Quantity	Grand Total Unit Price	Grand Total
		E2010		Fixed Furnishings			
			12-32-13.10	Allowance for fixed furnihsings	12,250.00 m2	104.50	1,280,125
G				BUILDING SITEWORK			
	G10			Site Preparation			
		G1010		Site Clearing			
			31-14-13.23	Site clearing (Allowance)	1.00 ls	35,000.00	35,000
	G20			Site Improvements			
		G2010		Roadways			
			32-12-16.14	Allowance for roadways	1.00 ls	139,500.00	139,500
		G2020		Parking Lots			
			32-12-16.14	Allowance for parking	1.00 ls	150,000.00	150,000
		G2030		Pedestrian Paving			
			32-06-10.10	Sidewalks and patios	1.00 ls	175,000.00	175,000
		G2040		Site Development			
			32-32-13.10	Site Developement (Allowance)	1.00 ls	200,000.00	200,000
		G2050		Landscaping			
			32-92-23.10	Landscaping	1.00 ls	150,000.00	150,000
	G30			Site Civil / Mechanical Utilities			
		G3020		Sanitary Sewer			
			33-31-13.13	Sanitary Sewer	1.00 ls	25,000.00	25,000
		G3030		Storm Sewer			
			33-41-13.40	Storm Sewer	1.00 ls	25,000.00	25,000
		G3090		Other Site Mechanical Utilities			
			33-51-13.10	Other Site Mechanical Utilities	1.00 ls	8,000.00	8,000
	G40			Site Electrical Utilities			
		G4010		Electrical Distribution			
			33-71-19.15	Electrical Distribution	1.00 ls	40,000.00	40,000
		G4020		Site Lighting			
			33-71-13.23	Site Lighting	1.00 ls	42,000.00	42,000
		G4030		Site Communication and Security			
			33-71-13.23	Site Communications	1.00 ls	10,500.00	10,500
Z				GENERAL REQUIREMENTS AND ALLOWANCES			
	Z10			General Requirements			
		Z1010		Supervision and Labour Expenses			
				Head Office Administration			
			01-31-13.20	Head Office Personnel, estimator	10.00 week	3,000.00	30,000
			01-31-13.20	Head Office Personnel, scheduler	52.00 week	3,200.00	166,400
			01-31-13.20	Head Office Personnel, coordinator	52.00 week	2,800.00	145,600
				On-Site Office Administration			
			01-31-13.20	Field Personnel, clerk, average	176.00 week	1,750.00	308,000
				Project Management			
			01-31-13.20	Field Personnel, project manager, average	78.00 week	2,750.00	214,500
				Project Coordination			
			01-31-13.20	Field Personnel, superintendent, average	156.00 week	3,000.00	468,000

U1	U2	U3	Phase	Description	Takeoff Quantity		Grand Total Unit Price	Grand Total
				Project Coordination				
			01-31-13.20	Field Personnel, superintendent, assistant	78.00	week	3,052.00	238,056
			01-31-13.20	Field Personnel, project coordinator	78.00	week	2,800.00	218,400
			01-31-13.20	Field Personnel, field engineer, average	52.00	week	2,800.00	145,600
				Watchmen & Security				
			01-56-32.50	Watchman, security service, uniformed person, monthly basis, max	4,800.00	hr	45.45	218,160
				Safety				
			01-31-13.20	Field Personnel, safety officer	78.00	week	2,800.00	218,400
			01-31-13.20	Field Personnel, safety coordinator	52.00	week	2,400.00	124,800
				Quality Control				
			01-31-13.20	Field Personnel, quality control	52.00	week	2,800.00	145,600
		Z1030		**Temporary Conditions**				
				Cranes / Hoisting				
			01-54-33.60	Rent crane tower, static, 2800 kg capacity at 2 m/s	350.00	day	1,550.00	542,500
			01-54-33.60	Rent crane truck mount, cable 8x4 drive 100 met tons at 4.6 m radius	50.00	day	1,772.00	88,600
				Equipment & Tools				
			01-52-13.40	Small Tools Allowance	36.00	mnth	1,100.00	39,600
			01-52-13.40	Equipment Allowance	36.00	mnth	2,000.00	72,000
				Scaffolding				
			01-54-23.70	Scaffolding building exterior face	3,500.00	m2	20.66	72,299
			01-56-13.90	Winter protectn,tarpaulins hung over scaffolding,8 us,excl scaffolding	3,500.00	m2	7.09	24,826
			01-54-23.70	Scf,stl tbl,hvy dty shr for elv slb frm,flr ar,lbr onl erc&dsmn,2450 h	3,500.00	m2	10.30	36,062
				Temporary Site Buildings				
			01-52-13.20	Office Trailer, furnished, rent per month, 15m x 3m, excl. hookups	72.00	ea	1,250.00	90,000
			01-52-13.20	Portable Buildings, economy pre-fab on skids, 2400mm x 2400mm	100.00	m2	946.18	94,618
			01-52-13.20	Storage Boxes, rent per month, 6m x 2400mm	36.00	ea	76.00	2,736
			01-54-33.40	Rent toilet portable chemical	2,200.00	day	11.90	26,180
				Site Buildings Expense				
			01-52-13.40	Field Office Expense, office equipment rental, average	36.00	mo	200.00	7,200
			01-52-13.40	Field office expense,telephone bill; avg bill/month,incl long dist.	36.00	mo	400.00	14,400
			01-52-13.40	Field Office Expense, field office lights & HVAC	36.00	mo	500.00	18,000
			01-54-33.40	Rent toilet portable chemical	2,190.00	day	11.90	26,061
				Temporary Services				
			01-51-13.80	Temporary Gas Hook-up	1.00	ls	3,500.00	3,500
			01-51-13.80	Temporary Water Service - Hookup & Meter	1.00	ls	25,000.00	25,000
			01-51-13.80	Temporary Heat & Hoard, 24 hours per day, incl. fuel and operation	12,250.00	m2fl	12.96	158,718
			01-51-13.80	Temporary Heat, per week, 12 hours per day, incl. fuel and operation	12,250.00	m2fl	1.54	18,825
			01-51-13.80	Temporary Heat, per week, 24 hours per day, incl. fuel and operation	12,250.00	m2fl	2.86	35,057
			01-51-13.80	Temporary Power, for lighting only, 23.6 KWH/month, max	12,250.00	m2fl	0.29	3,553
			01-51-13.80	Temporary Utilities, power for job duration, incl. elevator, etc, max	12,250.00	m2fl	11.85	145,163
			01-51-13.80	Temporary utilities,temporary construction water bill per mo,average	36.00	mo	300.00	10,800
				Access Roads & Parking				
			01-55-23.50	Roads and sdwlk,tmpry,roads,gravl fill,200mm gravel depth,excl surfcng	500.00	m2	13.49	6,744
			01-55-23.50	Rds and sdwlk,tmpry,ramps,plywd,20mm plywd 50mm x 250mm jsts,400mm oc.	500.00	m2	50.55	25,274
				Protection & Removals				
			01-56-23.10	Barricades, wood, fixed, 3 rail, 1500mm high, 3 rail @ 50mm x 200mm	100.00	m	144.47	14,447
			01-56-26.50	Fencing, chain link, 1800mm high, 3mm thk.	1,500.00	m	28.19	42,291
			01-74-13.20	Snow Removal, cleanup by GC	30.00	day	800.00	24,000
				Survey & Layout				
			01-71-23.13	Conventional Surveying, crew for building layout, 2 person crew	60.00	day	832.09	49,925
				Signage				
			01-58-13.50	Project Signs, sign, high intensity reflectorized, incl post	2.00	ea	4,500.00	9,000
				Clean-up				
			01-74-13.20	Cleaning up,cleanup floor area,continuous,per day,during construction	12,250.00	m2	2.28	27,940
			01-74-13.20	Cleaning Up, cleanup of floor area, final by GC at end of job	12,250.00	m2	1.10	13,528
			01-74-13.20	Snow Removal, cleanup by GC	30.00	day	800.00	24,000
				Testing & Commissioning				
			01-45-23.50	Testing	1.00	ls	50,000.00	50,000
			01-45-23.50	Commissioning	1.00	ls	400,000.00	400,000

U1	U2	U3	Phase	Description	Takeoff Quantity	Grand Total Unit Price	Grand Total
		Z1050		Permits, Bonds & Insurance			
				Permits			
			00-31-43.00	Development Permit, 2.50/1000	50,000.00 k	2.50	125,000
			00-31-43.00	Building Permit, 7.25/1000	50,000.00 k	7.25	362,500
				Bonding			
			00-61-13.00	Performance Bond, 6/1000	50,000.00 k	6.00	300,000
			00-61-13.00	Labour & Material Bond, 3/1000	50,000.00 k	3.00	150,000
				Insurance			
			00-73-16.00	Insurance, Wrap-Up, 3/1000	50,000.00 k	3.00	150,000
			00-73-16.00	Insurance, Course of Construction, 4/1000	50,000.00 k	4.00	200,000

U1	U2	U3	Description	Quantity		Rate	Grand Total
D			**SERVICES**				
	D20		**Plumbing**				
		D2010	**Plumbing Fixtures**				
			Plumbing Fixtures				
			Watercloset: Wall mount c/w carrier & EFV	60.00	No.	1,914.00	114,840
			Handicap wall mount W.C. c/w carrier & EFV	16.00	No.	1,914.00	30,624
			Lavatory basins, oval drop-in style c/w IR faucet	60.00	No.	1,522.50	91,350
			Handicap lavatory basins c/w IR faucets	16.00	No.	1,566.00	25,056
			Urinals, wall mount c/w carrier & RFV	40.00	No.	1,653.00	66,120
			Single bowl SS sink c/w 2 handle faucet	6.00		1,044.00	6,264
			SS double bowl sinks, complete	4.00	No.	870.00	3,480
			Janitors mop sink, complete	4.00	No.	2,784.00	11,136
			Washroom floor drains	30.00	No.	191.40	5,742
			Floor drains, other areas	12.00	No.	165.30	1,984
			Mechanical room floor drains	14.00	No.	208.80	2,923
			Allow. For refrig. Drinking fountains	10.00	No.	7,830.00	78,300
			Non freeze hose bibs for landscaping	6.00	No.	391.50	2,349
			D2010 Plumbing Fixtures				**440,168**
		D2020	**Domestic Water Distribution**				
			Domestic water hook-ups, mains and branches	1.00	ls	195,750.00	195,750
			Thermal insulation for domestic piping	1.00	ls	36,540.00	36,540
			Bronze recirc. Pump	1.00	No.	2,610.00	2,610
			Incoming water supply	1.00	ls	43,500.00	43,500
			D2020 Domestic Water Distribution				**278,400**
		D2030	**Sanitary Waste**				
			DMV sanitary hook-ups, mains and branches	1.00	ls	174,000.00	174,000
			Buried sanitary piping	1.00	ls	139,200.00	139,200
			Excavation, bedding and first 300mm cover	1.00	ls	104,400.00	104,400
			Duplex san. Sump pumps & panel	1.00	ls	30,450.00	30,450
			D2030 Sanitary Waste				**448,050**
		D2040	**Rain Water Drainage**				
			Roof drains (Controlled flow) complete	40.00	ea	550.00	22,000
			36" Sz lead sheets for RD's	24.00	m	100.00	2,400
			Storm water drainage buried	1.00	ls	60,000.00	60,000
			Excavation, bedding and first 300mm cover	1.00	ls	40,400.00	40,400
			Thermal insulation for 3m ea RD	40.00	ea	250.00	10,000
			D2040 Rain Water Drainage				**134,800**
		D2090	**Other Plumbing Systems**				
			Gas service to boilers	3.00	No	15,000.00	45,000
			Gas fired storage water heaters	2.00	No	20,000.00	40,000
			Gas pressure regulators	5.00	No	500.00	2,500
			D2090 Other Plumbing Systems				**87,500**
	D30		**Heating, Ventilation & Air Conditioning (HVAC)**				
		D3020	**Heat Generation**				
			Gas fired condesing boilers	3.00	No.	80,040.00	240,120
			Inline boiler circ. Pumps	2.00	No.	2,088.00	4,176
			Direct vented high eff. Water heaters	2.00	No.	19,575.00	39,150
			Dom. Hot water recirc. Pum, bronze	1.00	No.	1,566.00	1,566
			Heating circulation pumps	2.00	No.	10,440.00	20,880
			Variable speed drives for above pumps	2.00	No.	6,960.00	13,920
			Inline glycol htg. Pumps for coils	6.00	No.	2,175.00	13,050

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U1	U2	U3	Description	Quantity		Rate	Grand Total
			Expansion tank heating	1.00	No.	2,784.00	2,784
			Expansion tank glycol	1.00	No.	3,045.00	3,045
			Vibration isolation equipment	1.00	ls	7,830.00	7,830
			Water to glycol heat exchanger	1.00	No.	8,265.00	8,265
			Glycol fill tank & pump	1.00	No.	6,090.00	6,090
			Allowance for propylene glycol	1.00	ls	2,262.00	2,262
			Chemical pot feeder, micron filter, etc.	1.00	No.	1,914.00	1,914
			Boiler room piping and valves	1.00	ls	59,769.00	59,769
			Thermal insulation, PVC finished	1.00	ls	34,800.00	34,800
			Allowance for welding	1.00	ls	21,750.00	21,750
			Instruments and guages	1.00	ls	2,175.00	2,175
			D3020 Heat Generation				**483,546**
		D3030	**Refrigeration**				
			High efficiency chillers, complete	2.00	No.	113,100.00	226,200
			Inline chilled water circulating pumps	2.00	No.	8,352.00	16,704
			Variable spped drives for pumps	2.00	No.	6,960.00	13,920
			250 litre chilled water storage tanks, insulated	4.00	ea	10,875.00	43,500
			Multicell closed circuit fluid cooler	1.00	No.	108,750.00	108,750
			Condenser water pumps	2.00	No.	10,440.00	20,880
			Variable speed drives for above pumps	2.00	No.	6,960.00	13,920
			Chilled and condenser water piping and valves	1.00	ls	165,300.00	165,300
			Allowance for welding pipe, etc.	1.00	ls	13,050.00	13,050
			Thermal insulation for piping PVC covered	1.00	ls	85,260.00	85,260
			Condenser water expansion tank	1.00	No.	2,175.00	2,175
			Glycol heat exchanger	1.00	No.	5,220.00	5,220
			Propylene glycol solution	1.00	ls	2,784.00	2,784
			Glycol fill station and tank	1.00	ls	7,482.00	7,482
			Chilled water expansion tank	1.00	No.	2,871.00	2,871
			Chemical pot feeders and sight glasses, etc.	2.00	No.	3,132.00	6,264
			Vibration isolation equipment	1.00	No.	10,440.00	10,440
			Instruments and guages	1.00	ls	2,175.00	2,175
			D3030 Refrigeration				**746,895**
		D3040	**HVAC Distribution**				
			Radiant ceiling panels, complete	1.00	ls	417,600.00	417,600
			Wall fin radiation	1.00	ls	31,320.00	31,320
			Alllowance for in floor radiant heating	1.00	ls	26,100.00	26,100
			Cabinet heater, suspended c/w duct & grilles	8.00	No	2,523.00	20,184
			Unit heaters complete	3.00	No	1,392.00	4,176
			Heating piping	1.00	ls	110,000.00	110,000
			Chilled water piping	1.00	ls	72,210.00	72,210
			Pipe thermal insulation	1.00	ls	113,100.00	113,100
			Valves, check valves, strainers, etc.	1.00	ls	60,900.00	60,900
			Fresh air plenum and louvres	1.00	ls	27,840.00	27,840
			Supply air ductwork	1.00	ls	800,182.50	800,183
			Displacement diffusers	1.00	ls	31,320.00	31,320
			Ceiling supply diffusers	1.00	ls	33,060.00	33,060
			Return/transfer grilles	1.00	ls	17,400.00	17,400
			Exhaust duct	1.00	ls	161,820.00	161,820
			Return air ducting	1.00	ls	178,350.00	178,350
			Acoustic treatment - auditorium ductwork	1.00	ls	27,840.00	27,840
			Ductwork thermal insulation	1.00	ls	326,902.50	326,903
			D3040 HVAC Distribution				**2,460,305**
		D3050	**Terminal and Packaged Units**				
			Air handling units with coils, attenuators etc.	4.00	No.	261,000	1,044,000
			Air filtration on AHU's	4.00	No.	17,400	69,600

U1	U2	U3	Description	Quantity		Rate	Grand Total
			Displacement VAV ventilation units	2.00	No.	130,500	261,000
			Variable frequency drives for above units	2.00	No.	9,570	19,140
			Air handler unit on 2nd floor	2.00	No.	83,520	167,040
			Heat recovery wheels in ventilation units	2.00	No.	26,100	52,200
			Variable frequency drives for above units	2.00	No.	8,700	17,400
			Stage housing exhaust fan	2.00	No.	10,092	20,184
			Variable speed drive for above fan	2.00	No.	6,960	13,920
			Washroom exhaust fans on roof	6.00	No.	3,480	20,880
			Hjanitor rom exhaust fans on roof	2.00	No.	2,784	5,568
			Locker room exhaust fans on roof	2.00	No.	4,524	9,048
			Allowance for smoke exhaust fans for stagehouse	4.00	No.	3,306	13,224
			VAV terminal boxes	12.00	No.	1,400	16,800
			D3050 Terminal and Packaged Units				**1,730,004**
		D3060	**HVAC Instrumentation and Controls**				
			BMS HVAC controls	12,250.00	m2	65.00	796,250
			D3060 HVAC Instrumentation and Controls				**796,250**
		D3070	**Testing, Adjusting, Balancing**				
			Allowance for Testing/Balancing/Commissioning	12,250.00	m2	3.00	36,750
			D3070 Testing, Adjusting, Balancing				**36,750**
		D3090	**Other Special HVAC Systems**				
			Water treatment and chemicals	1.00	L/S	26,100.00	26,100
			Exhaust piping for emergency generator	1.00	L/S	10,440.00	10,440
			Air intake and attentuation for generator	1.00	L/S	13,050.00	13,050
			Oil storage day tank and piping	1.00	L/S	9,570.00	9,570
			D3090 Other Special HVAC Systems				**59,160**
	D40		**Fire Protection**				
		D4010	**Sprinklers**				
			Automatic sprinklers to NFPA 13	12,250.00	m2	38.00	465,500
			Dry pipe system for unloading and dock canopy	1.00	ls	8,600.00	8,600
			Electric fire fump	1.00	No	88,000.00	88,000
			Preaction system for stagehouse	1.00	ls	12,500.00	12,500
			Portable hand held fire extinguishers	14.00	No	180.00	2,520
			D4010 Sprinklers				**577,120**
	D50		**Electrical**				
		D5010	**Electrical Services and Distribution**				
			Electrical Branch Circuit Panelboards				
			Switchboards, Panelboards and Control Centers				
			Main breaker, 1200A	1.00	No.	20,000.00	20,000
			Utility Metering	1.00	No.	3,600.00	3,600
			Digital Metering	1.00	No.	2,500.00	2,500
			Main CDP, 1600A, 347/600V, 3P, 4W	2.00	No.	25,000.00	50,000
			Secondary Main CDP, 400A, 120/208V, 3P, 4W	2.00	No.	9,500.00	19,000
			MCC3, 400A, 347/600V, 4 sections	2.00	No.	20,000.00	40,000
			Secondary distribution panels - 42 ccts., 225A, 347/600V	10.00	No.	2,800.00	28,000
			Secondary distribution panels - 60 ccts., 225A, 347/600V	4.00	No.	3,000.00	12,000
			Secondary distribution panels - 42 ccts., 225A, 120/208V	5.00	No.	2,500.00	12,500
			Secondary distribution panels - 60 ccts., 225A, 120/208V	3.00	No.	2,700.00	8,100
			Secondary distribution panels, BP.3-A3 - Lighting panel, 42 ccts., 225A, 347/600V	4.00	No.	3,000.00	12,000
			LVRP - Lighting Relay Panel	6.00	No.	3,000.00	18,000
			Emergency Generator, 200kw diesel, c/w 300A, 600V transfer switch	1.00	No.	250,000.00	250,000
			UPS, 200kw, c/w 300A, 600V transfer switch	1.00	No.	750,000.00	750,000
			Main Emergency CDP, 400A, 347/600V, 3P, 4W	1.00	No.	12,000.00	12,000

U1	U2	U3	Description	Quantity		Rate	Grand Total
			Surge Protector	2.00	No.	5,900.00	11,800
			Rough-in & hook-up to elevator equipment	3.00	No.	3,500.00	10,500
			Grounding	4.00	No.	2,500.00	10,000
			Transformer - 75kVA, 600V-120/208V	10.00	No.	7,500.00	75,000
			Conduit & wire	1.00	No.	100,000.00	100,000
			D5010 Electrical Services and Distribution				**1,445,000**
		D5020	**Lighting and Branch Wiring**				
			Electrical Branch Wiring				
			Wiring Devices				
			Duplex Receptacles	250.00	No.	60.00	15,000
			Fourplex Receptacles - 20A	330.00	No.	150.00	49,500
			Duplex Receptacles - ceiling	50.00	No.	80.00	4,000
			Duplex Receptacles - floor mounted	30.00	No.	250.00	7,500
			Duplex Receptacles - W.P, GFI	10.00	No.	150.00	1,500
			Heat tracing system - self regulating	400.00	m	60.00	24,000
			Duplex Receptacles - 20A, housekeeping	30.00	No.	125.00	3,750
			Twistlock Receptacles - 20A	9.00	No.	175.00	1,575
			Twistlock Receptacles - 30A	3.00	No.	200.00	600
			Light switch - L.V, S.P	150.00	No.	110.00	16,500
			Occupancy sensor switch	80.00	No.	185.00	14,800
			Occupancy sensor	40.00	No.	300.00	12,000
			Conduit & Wire	1.00	No.	154,550.00	154,550
			Wiring Connections - Mechanical Items				
			R/I & H/U to kitchen equipment	30.00	No.	400.00	12,000
			R/I & H/U to mechanical equipment	65.00	No.	450.00	29,250
			Conduit & Wire	1.00	No.	13,075.00	13,075
			Lighting				
			Lighting Type - Main entrance special lighting	4.00	No.	10,000.00	40,000
			Lighting Type - fluorescent for hallways	250.00	No.	290.00	72,500
			Lighting Type - fluorescent for storage, offices and miscellaneous areas	175.00	No.	260.00	45,500
			Lighting Type - fluorescent for stairways	20.00	No.	245.00	4,900
			Lighting Type - for dining area and servery	30.00	No.	1,000.00	30,000
			Lighting Type - for exterior lights	20.00	No.	550.00	11,000
			Building / hallway dimming racks	3.00	No.	12,500.00	37,500
			Exit lights	30.00	No.	300.00	9,000
			Conduit & Wire	1.00	No.	1,400,000.00	1,400,000
			D5020 Lighting and Branch Wiring				**2,010,000**
		D5030	**Communications and Security**				
			P.A / Paging System				
			Panel	1.00	No.	8,500.00	8,500
			Speakers	40.00	No.	300.00	12,000
			Audio-Video Systems and equipment for theatres	1.00	No.	2,700,000.00	2,700,000
			Security / C.C.T.V Systems				
			Panel	1.00	No.	10,000.00	10,000
			Card reader	5.00	No.	1,250.00	6,250
			Door monitoring switch	10.00	No.	300.00	3,000
			Help phone	4.00	No.	300.00	1,200
			Electric door strike	5.00	No.	350.00	1,750
			Intercom device c/w call button	5.00	No.	900.00	4,500
			Cameras	6.00	No.	2,500.00	15,000
			Cameras - W.P	4.00	No.	4,500.00	18,000
			Security junction boxes	10.00	No.	150.00	1,500
			Conduit & Wire	1.00	No.	40,000.00	40,000
			Testing	120.00	hrs.	80.00	9,600

U1	U2	U3	Description	Quantity		Rate	Grand Total
			D5030 Communications and Security				**2,831,300**
		D5090	**Other Electrical Systems**				
			Fire Alarm System				
			Detection systems, fire alarm, main control panel	1.00	ea	6,500.00	6,500
			Detection systems, fire alarm, annunciator panel	2.00	ea	2,500.00	5,000
			Detection systems, fire alarm, break glass station	5.00	ea	300.00	1,500
			Detection systems, fire alarm, horn/strobe	30.00	ea	350.00	10,500
			Detection systems, smoke detectors - duct type	5.00	ea	400.00	2,000
			Detection systems, smoke detectors	25.00	ea	300.00	7,500
			Detection systems, fire alarm, EOL resistors	20.00	ea	250.00	5,000
			Detection systems, fire alarm monitoring module	4.00	ea	300.00	1,200
			Detection systems, fire alarm pressure switch	4.00	ea	300.00	1,200
			Detection systems, fire alarm junction box	50.00	ea	60.00	3,000
			Detection systems, fire alarm, sprinkler flow switch	4.00	ea	300.00	1,200
			Detection systems, fire alarm, sprinkler tamper switch	4.00	ea	300.00	1,200
			Fire Alarm System testing and documentation	80.00	Hrs	80.00	6,400
			Detection systems, fire alarm system verification (ALLOWANCE)	1.00	No.	2,500.00	2,500
			Conduit & Wire	1.00	No.	15,000.00	15,000
			TV System				
			TV outlets	10.00	ea.	150.00	1,500
			TV outlets - ceiling mounted	10.00	ea.	170.00	1,700
			Conduit and wire	150.00	m	20.00	3,000
			Clocks	20.00	No.	500.00	10,000
			Data System				
			Data Outlet	10.00	ea	140.00	1,400
			Voice outlet	10.00	ea	125.00	1,250
			Combination outlets : 2-data, 1-voice	20.00	ea	250.00	5,000
			Data outlet - ceiling mounted	10.00	ea	150.00	1,500
			Wireless access points	10.00	ea	300.00	3,000
			Data rack	2.00	ea	500.00	1,000
			Cable tray	350.00	m	80.00	28,000
			Cable management panels	2.00	ea	250.00	500
			Patch panels	1.00	ea	850.00	850
			Fibre patch panel	1.00	ea	1,100.00	1,100
			Fibre links	30.00	m	40.00	1,200
			Cond to 4.6 m H,incl 2 termn,2 elb&11 bm clamps/30.5 m,(EMT),20 mm dia	400.00	m	10.00	4,000
			CAT 6 - 4 Wire	500.00	m	15.00	7,500
			Data testing, documentation and labelling	35.00	Hrs	80.00	2,800
			Testing - general	1.00	No.	25,000.00	25,000
			Cad as-builts	1.00	No.	10,000.00	10,000
			D5090 Other Electrical Systems				**180,000**
G			**BUILDING SITEWORK**				
	G30		**Site Civil / Mechanical Utilities**				
		G3020	**Sanitary Sewer**				
			Sanitary hookup	1.00	No	25,000.00	25,000
			G3020 Sanitary Sewer				**25,000**
		G3030	**Storm Sewer**				
			Storm sewer hookup	1.00	No	25,000.00	25,000
			G3030 Storm Sewer				**25,000**
		G3090	**Other Site Mechanical Utilities**				
			Gas hookup	1.00	no.	8,000.00	8,000

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U1	U2	U3	Description	Quantity		Rate	Grand Total
			G3090 Other Site Mechanical Utilities				**8,000**
	G40		**Site Electrical Utilities**				
		G4010	**Electrical Distribution**				
			Empty conduits, encased in concrete, from property line to main transformer	20.00	m	150.00	3,000
			Grounding General	1.00	ea	2,500.00	2,500
			Main primary power feeders - BY UTILITY COMPANY		ea		0
			Main transformer - BY UTILITY COMPANY		ea		0
			Main transformer vault/pad	1.00	ea	2,300.00	2,300
			Main transformer grounding	1.00	ea	2,250.00	2,250
			Rough-in and hook-up to main site sign	1.00	ea	1,950.00	1,950
			Secondary feeders from main transformer to MDP on second floor	40.00	m	275.00	11,000
			Utility Company Fees (ALLOWANCE)	1.00	L/S	10,000.00	10,000
			Car plug-ins	20.00	ea	350.00	7,000
			G4010 Electrical Distribution				**40,000**
		G4020	**Site Lighting**				
			Exterior fixts, MH, light poles, 7.3 m H, 1 pole, 2 heads, 250W	12.00	ea	3,500.00	42,000
			G4020 Site Lighting				**42,000**
		G4030	**Site Communications**				
			Telus empty conduits,ugnd duct, PVC, type DBII duct, 2 @ 100 mm dia	100.00	m	30.00	3,000
			EOL fibre & 1 spare empty conduit, empty ugnd duct, PVC, type EB 2 @ 100 mm dia	100.00	m	30.00	3,000
			Shaw, Supernet & 1 spare empty conduits,ugnd duct, PVC, type DBII duct, 3 @ 100 mm dia	150.00	m	30.00	4,500
			G4030 Site Communications				**10,500**