Project Report

Sound Stage Development Parameters

The Okanagan Valley, British Columbia

Prepared for

Okanagan Film Commission

Submitted by

Economics Research Associates

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Table of Contents

List of Figures

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Section I. Introduction & Executive Summary

Economics Research Associates ("ERA") has been commissioned to by the Okanagan Film Commission ("OFC") to perform a highly focused and cost efficient analysis of sound stage development parameters in the Okanagan Valley region of British Columbia. Situated approximately 400 km (240 miles) east of Vancouver, 600 km (360 miles) west of Calgary and 150 km (90 miles) north of the U.S. border, the Okanagan Valley is a fast-growing residential and tourist destination offering a variety of visitor-serving and recreational amenities, in addition to a comfortable year-round climate.

At present, the Okanagan Valley region does not have a full-service production facility. However, with recent increased production activity, the current lack of available industrial space in the Okanagan market, and strong current demand for stage space in Vancouver, the OFC believes that construction of a facility warrants further study.

In recent years, Canadian provinces have been engaged in an increasingly aggressive economic development strategy aimed at attracting motion picture production from around the world and into their regions. This strategy has been developed in conjunction with federal level incentives to grow and maintain an indigenous production capacity in addition to development of the service industry.

Purpose of the Project

The purpose of this study is to provide a brief analysis of the recent performance and existing conditions of the film/television/video industry in British Columbia and the Okanagan Valley region as they relate to the viability of sound stage development. This study is not a full market feasibility study for the demand of a sound stage but rather a test of the concept of stages in the Okanagan Valley at the level of viability.

As part of our analysis, representatives from ERA met with various stakeholders in the motion picture industry in Kelowna and Penticton between July 5th and July 7th, 2006. Other individuals were later contacted via telephone. All sources contacted are listed at the end of this report.

The following section focuses on production activity in British Columbia, in general, followed by a more focused review of activity in the Okanagan Valley. The remaining sections of this report deal specifically with project development parameters and the financial viability of a sound stage.

Key Findings of the Report

The film production in the British Columbia market, while mostly centered in Vancouver, could present some opportunities in the Okanagan Valley for both service productions (the largest users of stage space), in addition to higher budget domestic productions seeking stage space (e.g., the recent Canadian feature film,"Fido"). Stakeholder discussions indicate that Canadian productions would be more likely to utilize stage space outside of the Lower Mainland since service productions either: (1) go to Vancouver to utilize the large, purpose-built stages (among other incentives), or (2) take advantage of B.C.'s numerous location opportunities and then shoot interiors on stages back in Los Angeles.

Based upon ERA's research the following factors are included in our analysis for a potential production facility in the region:

- The demand for stage space and/or cover sets from projects either shooting or actively looking to shoot in the region appears to be sporadic
- There is currently a tight supply of available industrial space to accommodate any present demand for additional space
- There has been recent growth in local hi-tech companies such as ITIVA, which is looking for stage space of several thousand square feet
- CATO is going to be seeking available stage space to replace the small stage they will be losing

In the absence of an established anchor tenant such as television series, the demand for stage space in the Okanagan region is sporadic. Some productions such as "Fido" have shot on a combination of location and temporary stage space; however, the greatest numbers of productions shot locally in recent years were location shoots for television series and/or documentaries. Interviews with prospective user groups would suggest that local hi-tech firms and the Centre for Arts and Technology could generate consistent use of stage space. Also, since the Okanagan Valley is a fast-growing resident and tourist destination, it is likely that the region will begin to experience growing demand from local businesses for filmed product. In this sense, the Okanagan has the potential to receive increased future demand from both local and outside sources.

Given these general contours of the production market in the region, a modestly-sized facility that would be designed primarily to meet the needs of internal demand, while offering opportunities for external users who need stage space while shooting on location in the Okanagan, would likely be the most fruitful development for sound stage development in the Okanagan Valley. The center of the production community in Okanagan Valley is situated in the Central Okanagan, and therefore any capital investment in such a facility should be there. At present, Kelowna has the most developed transportation network and general urban agglomeration that can support production infrastructure.

In general, motion picture production facilities can work as operating businesses, that is to say, given appropriate levels of utilization, they are able to cover their operations costs with revenues greater than annual expenses. However, generally these facilities are not able to generate sufficient returns on the capital investment that is required in order to trigger conventional bank financing. This is why the overwhelming majority of sound stage development that occurs worldwide acts as some form of public/private partnership. It is likely that these kinds of structures will need to be explored in an eventual development program for the Okanagan Valley.

Because of the inability of sound stage facilities to have sufficient returns on capital investment, it is very important that any development program be as efficient as possible from a capital perspective. That is to say, it is very important not to overbuild any facility, and to allow for expansion over time if the market for additional space materializes. With these general principals in mind, it is possible to recommend the following development program for initial tasking in terms of their financial requirement for a facility in the Okanagan Valley.

Proposed Development Program

- Sound stages—two stages:
  - --Stage One—12,000 sq.ft.
  - --Stage Two—9,000 sq.ft.
- Management offices—2,000 sq.ft.
- Workshops—2,000 sq.ft.
- Production offices—2,000 sq.ft.

In general, it is not advisable to develop a project with less than two stages. It is necessary for most projects to be able to have a stage that is used for construction while shooting occurs adjacent. Similarly, the ability to use these stages as cover sets for outdoor location shooting when weather conditions would dictate, and to allow for smaller-scale interior constructions which would allow for efficiencies from a production team that is on location. This would represent a core, initial investment which would be able to meet the most immediate demands of existing users located in the Okanagan Valley, as well as cover the requirements of the vast majority of location-based productions coming into the region.

Capital costs associated with this project, which would be approximately C$4.1 million, exclusive of any land costs. We have structured the analysis to identify a value associated with extra market support in the form of reduction of capital costs, that would at a minimum bring the internal rate of return over a 10-year time period for the project to a break even point, or a 0 IRR. This would not be a high enough threshold for convention bank financing, however, could be the basis of a joint public/private partnership. Under this scenario, it would suggest a non-market contribution from some public source of a minimum of approximately C$2.5 million, exclusive of land, which would leave the total requirements of C$1.5 million from a private source

The presence of a sound stage facility in the market would allow the Okanagan Valley to improve its competitive position vis-à-vis other filming locations, both elsewhere in British Columbia and throughout Canada as a whole. As a result of this preliminary analysis and conversations with stakeholders in the Okanagan Valley and Vancouver, ERA believes that a small production facility with two stages, production and management offices would best suit the demand from local companies in addition to being an asset primarily to Canadian film and television productions seeking stage space.

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Section II. Production Activity in British Columbia

Introduction

Most production activity in the province British Columbia takes place in the City of Vancouver. Frequently referred to as "Hollywood North," Vancouver is the third largest production center in North America for U.S. productions, behind Los Angeles and New York. Both the City of Vancouver and the province of British Columbia have been successful in attracting production service production, primarily as a result of a favorable combination of skilled crews, state-of-the-art production infrastructure, daily non-stop flights to and from Los Angeles, and tax incentives.

This section first looks at production statistics for province, followed by an analysis of data for the Okanagan region in the following section. The purpose of this section is to provide an overview of production activity in the province of British Columbia as it relates to synergies and potential opportunities for production activity in the Okanagan Valley. With direct non-stop air access from the Okanagan Valley to Vancouver, the region has provided location opportunities for projects whose principal photography takes place in Vancouver and other parts of Canada.

It should be noted that all of the figures presented in this section are in Canadian dollars (CD$).

Comparative Film and Television Production by Province

To put the annual volume of film and television production activity in British Columbia into a national perspective, data from the Canadian Film and Television Production Association ("CFTPA") reports that British Columbia is the third largest production center in Canada behind Ontario and Quebec. Last year the province reported a total of $909 million in production activity, representing a one year decline of 41 percent. This compared to $1.8 billion in Ontario and $1.3 billion in Quebec that same year. This information appears in Figure 1.

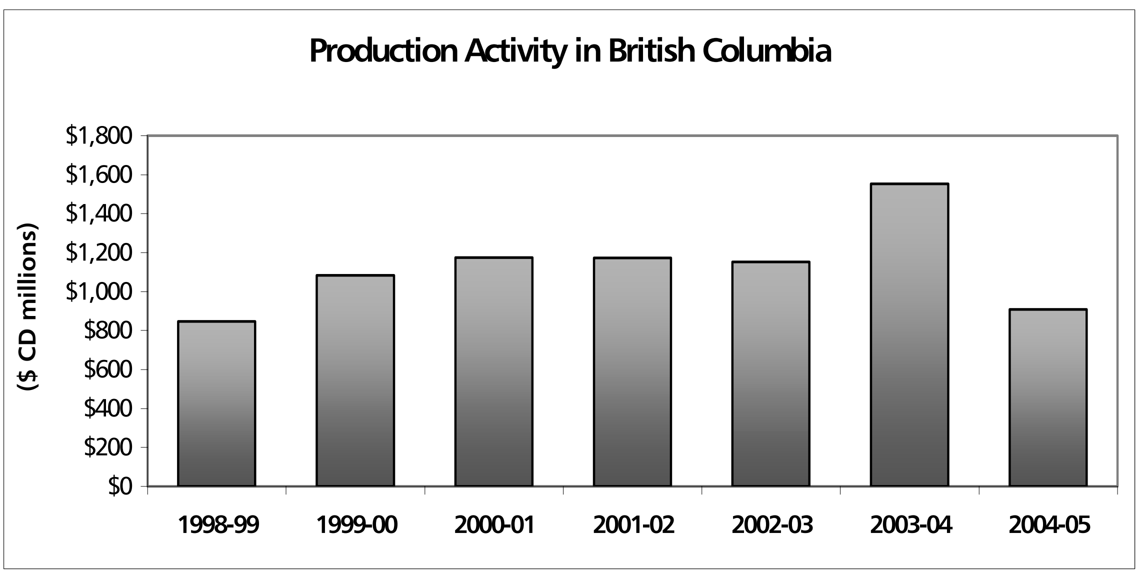
Historically the province of British Columbia has been dependent upon high-budget U.S. productions. As shown in Figure 1, provincial production activity peaked at $1.56 billion in FY 2004. Much of the province's success in attracting high-budget U.S. film and television productions is due to the presence of purpose-built sound stages (discussed further in this section).

Comparing the total volume foreign film and television production in British Columbia in FY 2005, Figure 2 shows that British Columbia attracted $567 million in foreign production activity, representing a major decline of 54 percent over a one-year period. The exodus of several high-profile U.S. projects was the reason, further demonstrating the province's dependence upon this market segment. During the prior year (FY 2004), British Columbia attracted a total volume of foreign location shooting of $1.2 billion, which was 3.6 times the amount of its nearest provincial competitor, Ontario ($340 million).

Figure 1
Volume of Film and Television Production by Province
(CD $ millions)

	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	% Chg.	1 year growth
British Colombia*	$847	$1,084	$1,175	$1,172	$1,152	$1,553	$909	7%	-41%
Ontario	$1,548	$1,755	$1,874	$1,939	$1,978	$1,768	$1,853	20%	5%
Quebec	$1,188	$1,286	$1,245	$1,218	$1,413	$1,216	$1,309	10%	8%
Nova Scotia	$123	$134	$118	$131	$136	$122	$116	-6%	-5%
Alberta	$131	$239	$179	$153	$197	$112	$106	-19%	-5%
Manitoba	$62	$44	$69	$74	$85	$111	$92	48%	-18%
Saskatchewan	$49	$37	$41	$32	$81	$40	$73	49%	85%
New Brunswick	$21	$15	$31	$17	$16	$17	$28	33%	70%
Newfoundland	$9	$7	$11	$15	$6	$8	$6	-33%	-26%
Prince Edward Island	$2	$8	$6	$8	$10	$5	$2	0%	-51%
Total Productions	**$3,133**	**$3,525**	**$3,574**	**$3,587**	**$3,922**	**$3,399**	**$3,585**	**14%**	

*Includes the Northwest Territories, Nunavut and the Yukon

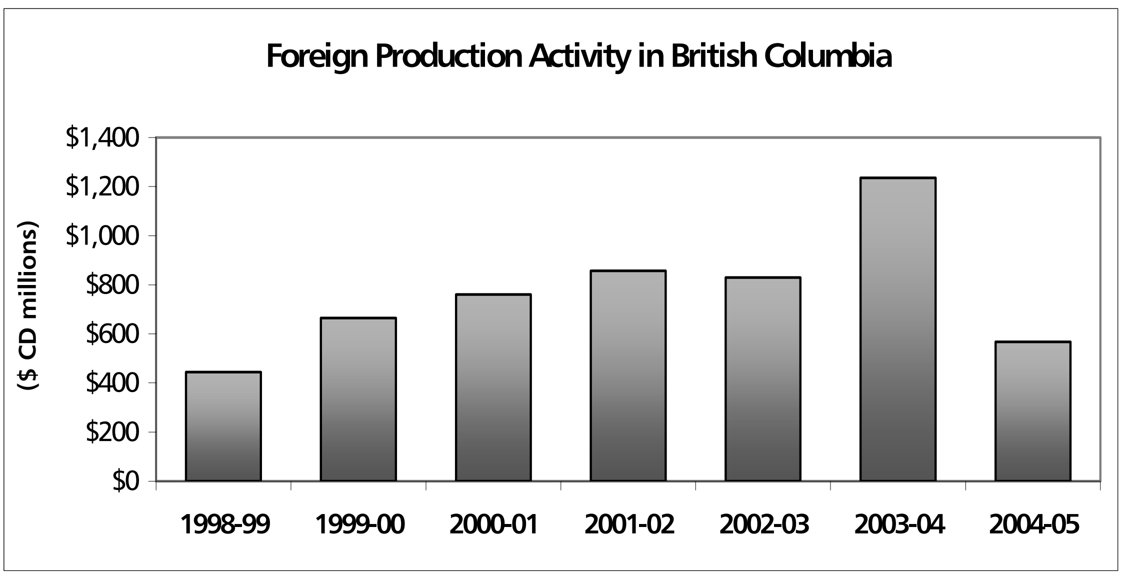


Source: CFTPA: *Profile 2006*

Figure 2
Volume of Foreign Location Production by Province
(CD $ millions)

	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	% Chg.	1 year growth
British Colombia*	$445	$664	$760	$857	$830	$1,236	$567	27%	-54%
Ontario	$347	$443	$543	$561	$549	$340	$521	50%	53%
Quebec	$197	$213	$337	$215	$399	$193	$261	32%	35%
Nova Scotia	$18	$60	$35	$48	$52	$51	$36	100%	-29%
Alberta	$46	$112	$57	$34	$50	$0	$1	-98%	--
Manitoba	$27	$7	$25	$33	$34	$79	$54	100%	-32%
Saskatchewan	$16	$7	$0	$0	$0	$0	$23	44%	--
New Brunswick	$0	$0	$3	$3	$0	$0	$0	--	--
Newfoundland	$0	$0	$0	$8	$0	$0	$0	--	--
Prince Edward Island	$0	$0	$0	$0	$0	$2	$0	--	--
Total Productions	**$1,096**	**$1,506**	**$1,760**	**$1,759**	**$1,914**	**$1,901**	**$1,463**	**33%**	**-23%**

*Includes the Northwest Territories, Nunavut and the Yukon



Source: CFTPA: *Profile 2006*

Comparative Film and Television Production by Type

According to statistical information provided by the British Columbia Film Commission ("BCFC"), in 2005, film and television production in B.C. increased more than 50 per cent from 2004, contributing $1.2 billion to the provincial economy. It should be noted that these statistics differ from those previously reported by the CFTPA due to differences in accounting methodologies and the fact that the CTFPA tracks activity on a fiscal versus a calendar year basis (BCFC).

Production Dollars Spent in British Columbia

As shown in Figure 3, the vast majority of production dollars spent last year was from foreign sources. In 2005, foreign productions left an estimated $1 billion in the province, compared to $225 million from domestic sources. Over one-half of the foreign amount consisted of feature films ($580 million). By comparison, domestic television series accounted for 40 percent ($88.9 million) of total domestic production dollars in 2005. Overall, domestic productions in 2005 accounted for only 20 percent of the total dollar volume of activity in the province last year.

One thing that is noteworthy about Figure 3 is that it illustrates the decline in spending from domestic television series from $273 million in 2000 to only $88.9 million in 2005. This represents a decrease of 67 percent. By comparison, spending on foreign feature films increased by nearly 60 percent, though down from peak levels in 2003 (approximately $822 million). Also noteworthy is the decline in foreign "other TV" category (i.e., TV movies, mini series, special, pilots, etc.) from $147.7 in 2000 to $80.7 million in 2005. Foreign production dollars spent on television series, however, remained consistent.

Comparing the total amount of dollars left between years 2000 and 2005, domestic productions decreased by nearly 50 percent, while foreign ones increased by 33 percent. The only domestic category to increase over the period was in animation. This category increased by 73 percent over the period. The foreign "other TV" category was the only one to experience a decline. Once again, this table further illustrates the province's increasing dependence on foreign sources of production.

Number of Productions Filmed in British Columbia

Based on data from the BCFC, an average of 195 projects, both domestic and foreign, are shot in the province on an annual basis. Last year, a total of 211 projects were shot in British Columbia, representing the highest number over a five-year period between 2000 and 2005. This information appears in Figure 4.

Figure 3
Film and Television $ Spent in British Columbia
(in CD $)

	Production Type	2000	2001	2002	2003	2004	2005
Domestic							
	Feature Film	$59,500,000	$60,400,000	$47,400,000	$41,650,000	$49,750,000	$43,098,000
	Television Series	$273,000,000	$127,900,000	$51,200,000	$89,450,000	$100,340,000	$88,931,000
	TV Movies, Mini Series, Specials, Pilots, Documentaries, Other	$66,400,000	$39,500,000	$43,500,000	$29,220,000	$48,840,000	$57,139,000
	Animation	$20,500,000	$23,800,000	$21,500,000	$8,470,000	$14,950,000	$35,614,000
	Total Domestic	**$419,400,000**	**$251,600,000**	**$163,600,000**	**$168,790,000**	**$213,880,000**	**$224,782,000**
Foreign							
	Feature Film	$364,400,000	$324,100,000	$413,700,000	$821,580,000	$191,560,000	$580,283,260
	Television Series	$239,600,000	$320,300,000	$242,700,000	$308,860,000	$235,750,000	$298,099,723
	TV Movies, Mini Series, Specials, Pilots, Documentaries, Other	$147,700,000	$188,700,000	$166,200,000	$91,620,000	$137,520,000	$80,688,000
	Animation	$9,200,000	$23,800,000	$7,400,000	$13,710,000	$22,490,000	$49,822,000
	Total Foreign	**$760,900,000**	**$856,900,000**	**$830,000,000**	**$1,235,770,000**	**$587,320,000**	**$1,008,892,983**
Total		**$1,180,300,000**	**$1,108,500,000**	**$993,600,000**	**$1,404,560,000**	**$801,200,000**	**$1,233,674,983**

Source: British Columbia Film Commission

Figure 4
Number of Productions Filmed in British Columbia
2000-2005

Production Type	2000	2001	2002	2003	2004	2005
Domestic						
Feature Film	27	18	22	22	30	24
Television Series	21	19	7	22	15	18
TV Movies, Mini Series, Specials, Pilots, Documentaries, Other	52	69	97	54	65	65
Animation	8	7	14	2	6	11
Total Domestic	**108**	**113**	**140**	**100**	**116**	**118**
Foreign						
Feature Film	29	22	15	25	16	39
Television Series	15	19	12	15	21	13
TV Movies, Mini Series, Specials, Pilots, Documentaries, Other	38	40	32	25	31	28
Animation	2	3	6	4	10	13
Total Foreign	**84**	**84**	**65**	**69**	**78**	**93**
Total	**192**	**197**	**205**	**169**	**194**	**211**

Source: British Columbia Film Commission

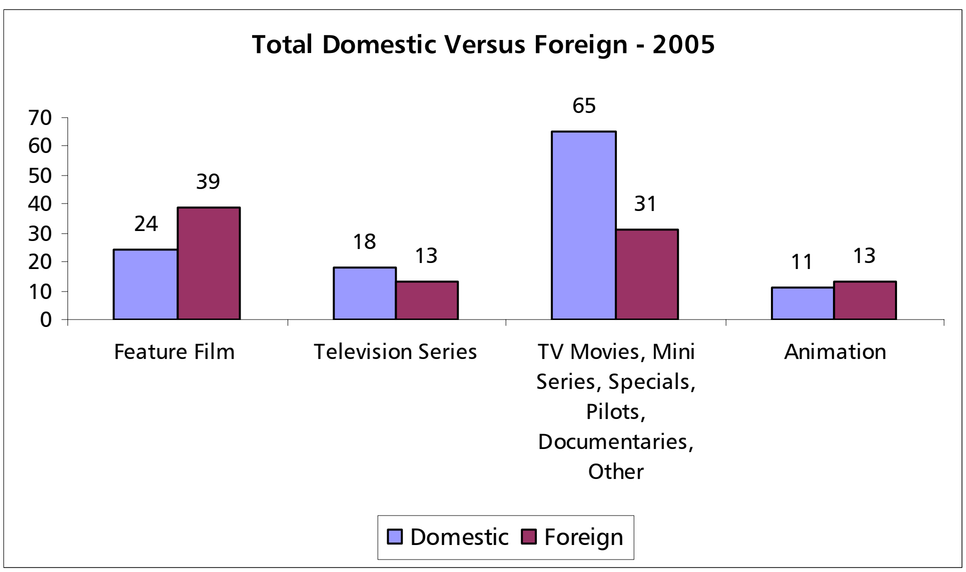
Domestic Productions

Last year a total of 118 domestic productions shot in the province. This is slightly down from a peak of 140 in 2002. Among those 118 productions shot in the province last year, the majority (55 percent of the total) were non-series-based television projects, followed by feature films (20 percent), television series (15 percent) and animation (9 percent). As will be discussed, in general feature films and television series tend to be the largest users of stage space.

Foreign Production

Last year a total of 93 foreign productions shot in British Columbia, representing the highest number over the five-year period. Regarding the 93 productions, the greatest number consisted of features (42 percent) and followed by other television projects (30 percent). Both foreign television series and animation projects tied for third place at 14 percent, respectively. In summary, foreign feature film productions outnumbered domestic features last year, lagged domestic television series, were greatly outnumbered by other types of domestic television, and slightly edged domestic animation (Figure 5).

Figure 5
Comparative Domestic vs. Foreign Productions
2005



Source: British Columbia Film Commission

As will be discussed in greater detail later in this report, the existence of state-of-the-art sound stages in the Vancouver area has been an attraction for high-budget studio features looking to take advantage of lower-cost labor, historically favorable exchange rates and competitive Canadian tax credits.

Comparative Canadian Tax Credits

Figure 6 on the following page lists the Canadian tax incentives that are currently in place for both domestic and foreign film and television production. Effective January 1, 2005, British Columbia raised both their domestic tax credit (Film Incentive BC) from 20 to 30 percent, and their production services tax credit (British Columbia Production Services Tax Credit) from 11 to 18 percent. This makes both tax credits competitive with those in the province of Ontario but lower than the existing credits in other provinces. Similar to

Figure 6
Canadian Film Tax Incentives

	Labor Expenditure Increase		
Tax Incentive Program	**From**	**To**	**Effective**
Film Incentive B.C.	20%	30%	1-Jan-05
British Columbia Production Services Tax	11%	18%	1-Jan-05
Ontario Film and Television Tax Credit	20%	30%	1-Jan-05
Ontario Production Services Tax Credit	11%	18%	1-Jan-05
Saskatchewan Film Employment Tax Credit	35%	45%	1-Jan-06
Manitoba Film and Video Production Credit	35%	45%	8-Mar-05
Quebec Production Services Tax Credit	11%	20%	1-Jan-05
Nova Scotia Film Industry Tax Credit	30%	35%	1-Jan-05

Source: Individual provinces and Economics Research Associates

Ontario, British Columbia's distinct advantage is its availability of world-class crews and available infrastructure.

Additionally, BC has a new regional tax credit of 6 percent of accredited qualified BC labor expenditures. This regional tax bonus applies to the Okanagan Valley region.

Figure 7
Individual Number of PSTC Projects by Type
FY 2000-2005

	Fiscal Year						
	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	% Chg.
Feature Film	12	17	37	24	17	29	142%
TV Series	11	10	23	17	12	13	18%
MOW, Pilot, Miniseries	22	58	55	40	20	24	9%
Animation	2	2	4	4	4	4	100%
Total	**47**	**87**	**119**	**85**	**53**	**70**	**49%**

Source: British Columbia Film

Productions Utilizing the Production Services Tax Credit

ERA reviewed tax data from the British Columbia Film, the entity which administers the provincial tax credit program on behalf of the provincial government, on the total number of foreign productions utilizing the Production Services Tax Credit (PSTC). Between fiscal years 2000 and 2005, PSTC productions increased by nearly 50 percent (Figure 7). The greatest increase was in feature films, which increased by 142 percent over the period, followed by animation (100 percent). This is significant since foreign feature film productions tend to be the largest users of stage space. The higher the production budget of a feature film, the greater likelihood it will be a user of stage space.

Figure 8 shows that the total production budgets of feature film projects applying for the PSTC also increased significantly between FY 2000 and 2005. Over this period, the total budgets increased from $118 million to $589 million, representing an increase of nearly 400 percent. The total budgets of television series applying for the tax credit also increased by 186 percent. Conversely, the total budgets of other types of television and animation projects, despite slightly higher numbers (Figure 7), declined.

Figure 8
Total Budgets of PSTC Projects
(CD $ 000s)
FY 2000-2005

	Fiscal Year						
	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	% Chg.
Feature Film	$118,100	$273,400	$496,400	$387,100	$289,100	$589,100	399%
TV Series	$117,200	$139,300	$305,700	$348,800	$246,100	$334,700	186%
MOW, Pilot, Miniseries	$102,100	$199,000	$208,400	$200,200	$77,900	$99,800	-2%
Animation	$18,400	$8,700	$24,500	$4,000	$17,800	$11,100	-40%
Total	**$355,800**	**$620,400**	**$1,035,000**	**$940,100**	**$630,900**	**$1,034,700**	**191%**

Source: British Columbia Film

To determine whether the average budgets of productions applying for the PSTC increased, ERA divided the total budgets by the individual number of productions by type. Figure 9 shows that the average budgets of feature film and television series productions applying for the PSTC increased significantly over the period. The average feature film budget increased from $9.8 million to $20.3 million (107 percent), while the average budget of a television series increased from $10.7 to $25.7 million (140 percent). Again, this is significant since these types of productions tend to be the largest users of stage space.

Figure 9
Average Budget of PSTC Projects
(CD $ 000s)

	Fiscal Year						
	1999/00	**2000/01**	**2001/02**	**2002/03**	**2003/04**	**2004/05**	**% Chg.**
Feature Film	$9,800	$16,100	$13,400	$16,100	$17,000	$20,300	107%
TV Series	$10,700	$13,900	$13,300	$20,500	$20,500	$25,700	140%
MOW, Pilot, Miniseries	$4,600	$3,400	$3,800	$5,000	$3,900	$4,200	-9%
Animation	$9,200	$4,400	$6,100	$1,000	$4,500	$2,800	-70%
Total	$7,600	$7,100	$8,700	$11,100	$11,900	$14,800	169%

Source: British Columbia Film

Infrastructure in British Columbia

Stage Space in British Columbia

At present, the province of British Columbia has a total of 24 production facilities with 60 stages and an approximate 1.2 million in combined square footage. This includes nine purpose built production facilities with stages (41 stages), eight converted studio facilities (12 stages), and seven commercial/FX stages (7 stages). Nearly two-thirds of these studio facilities are located within the Greater Vancouver area, most notably in Burnaby and Langley (Figure 10).

Figure 10
Studio Facilities in British Columbia

	Location		
Type	**Vancouver**	**Greater Vancouver**	**Total**
Purpose Built	4	5	9
Converted	3	5	8
Commercial/ FX Stages	2	5	7
Total	**9**	**15**	**24**

Source: British Columbia Film Commission and Economics Research Associates

A list of existing facilities appears in Figure 11. The fact that nearly 70 percent of the province's stages are purpose-built gives it a tremendous advantage in attracting high-budget service productions over other Canadian production centers such as Toronto.

Recent Stage Space Utilization Trends

The popularity of reality television, which is almost entirely shot on location, in late 2004 and 2005 had a strong impact on the utilization of stage space, both in Vancouver and Los Angeles. However, a recent surge in the demand for dramatic television series and waning popularity of reality television shows has generated renewed demand for stage space. According to Pete Mitchell of Vancouver Film Studios[1], the major studio facilities in the Greater Vancouver region are booked through year-end 2006, primarily with service (U.S.) productions. Whether this is a sustained or short-term trend is unknown at this point.

Despite the recent rise of the Canadian dollar to an all-time high, service production activity in the province of British Columbia appears to be strong this year.

Competition from Other Provinces

Presently, Vancouver remains the Canadian leader in purpose-built sound stage space. Unlike Vancouver, Toronto has suffered from the lack of purpose-built sound stage space. A new project, Filmport, is slated to have 13 soundstages totaling 1.25 million square feet of space. However, it was recently announced that this project has been delayed another year.

Calgary Economic Development is also actively pursuing the construction of a purpose built stage in Calgary. In the past, producers have utilized CFB Currie Barracks, a former military base with four stages, but this facility is slated to be redeveloped as a residential area within the next few years. Further, the Prairie provinces of Saskatchewan and Manitoba have studio facilities and available production space.

[1] Telephone interview on July, 25, 2006.

Figure 11
Sound Stage Infrastructure in British Columbia

Name	Type*	Location	Number of Stages	Stage Sq.Ft.	Special Features
Aja Tan Studios	CV	North Vancouver	2	1 @ 6,000 2 @ 4,800	75,000 s.f. New York street backlot; standing restaurant; standing loft residence; construction and support buildings
Allwest Studio	CV	Richmond	1	1 @ 19,000	24.5' clear span; sound insulated; wardrobe room; set décor lockup; office space
BCIT Broadcast	C/FX	Burnaby	1	1 @ 2,300; 1 @ 1,610	Both studios are supported by production offices with computers, dressing/make-up rooms; 24x2000 Watt Dimmer Multiscene Lighting Control
Bear Studios	C/FX	Vancouver	1	1 @ 2,038	Reception area; kitchen; washrooms; hair-makeup rooms; equipment
The Bridge Studios	PB	Burnaby	7	1 @ 15,000; 2 @ 12,650; 1 @ 15,700; 1 @ 12,000; 1 @ 9,000; 1 @ 40,400	Effects stage; 40,400 s.f., 50' to grid; production offices; wardrobe; props; mill; workshop facilities
CBC Studios	PB	Vancouver	3	1 @ 1,300; 1 @4,000; 1 @ 5,700	Green rooms; dressing rooms; makeup and production office space
Canadian Motion Picture Park	PB	Burnaby	4	1 @ 9,020; 2 @ 17,000; 1 @ 21,200	Newest purpose-built production facility in Greater Vancouver with 16,000-square-feet of office space; adjacent backlot (Pacific Studios, Inc.); all studios with laser level floors, prop storage, sound lock and a computerized air exchange system

Figure 11 (cont.)
Sound Stage Infrastructure in British Columbia

Name	Type*	Location	Number of Stages	Stage Sq.Ft.	Special Features
The Crossing Studios	CV	Burnaby	3	1 @ 24,000; 1 @ 13,500; 1 @ 6,000	8,700 s.f effects stage; production offices; equipment lockup
Eagle Creek Studios	PB	Burnaby	2	2 @ 17,000	Office and support space; fenced baklot
FastCat Studio	PB	North Vancouver	1	1 @ 57,000	38,000 s.f. warehouse; storage; wardrobe & laundry
First Avenue Studio	C/FX	Burnaby	1	1 @ 9,000	28' clear; 5,500 s.f. production offices
First Light Film Studios	C/FX	Burnaby	1	1 @ 9,900	Hardwall wrap-around cyc; 2400 amps power
Global	C/FX	Burnaby	1	1 @ 4,800	36'5" clear; 26' x 50' hardwall with ground roll; ample 3 phase power, 100 12K dimmers with full effects control; full broadcast and television production facilities
Great Northern Way Campus	CV	Vancouver	1	1 @ 16,000	Blackbox studio with 16,000 s.f. of total space, including stage, construction shop, storage
Langley Studio	CV	Langley	1	1 @ 26,000	Studio/warehouse with 20' ceiling and ample parking
MJA Studios	PB	Burnaby	1	1 @ 17,500	32' to 40' ceiling clear span; soundproofing air-removal system; lighting grid w/ wraparound curtains; office space; parking; on 1.4 acres
Mammoth Studios	PB	Burnaby	4	1 @ 87,309; 1 @ 123,886; 1 @ 60,004; 1 @ 36,487	Mezzanine of 32,448 s.f. - can be split down for office use
North Shore Studios[2]	PB	North Vancouver	8	2 @ 11,000; 3 @ 14,336 2 @ 20,500; 1 @ 15,000	Mills and support facilities

Figure 11 (cont.)

Sound Stage Infrastructure in British Columbia

Name	Type*	Location	Number of Stages	Stage Sq.Ft.	Special Features
Pacific National Exhibition	CV	Vancouver	2	1 @ 44,579 1 @ 19,800	Two multipurpose bldgs w/ high ceilings; set constructions; highspeed wireless internet access; long-term rentals
River Studio	CV	Burnaby	1	1 @ 58,000	Clear-span areas w/ 45' ceilings; 5,000 s.f. of office space; 3 large water pits; office space; on 5 acres
SFX Studio Inc.	C/FX	Burnaby	1	1 @ 1,000	Visual effects stage/insert stage/model stage 18'2 h ceiling; 300 s.f. furnished office space; in-house CGI, Prosthetics Lab; Props and Animatronics
SIM Studio	CV	Maple Ridge	1	1 @ 30,000	27' ceiling; 6 loading bays; 4,500 s.f. production office
Thomas Studios	C/FX	North Vancouver	1	1 @ 5,000	Prelit 20' x 90' digital green/blue screens; drive-in loading; suitable for flying rig; 1,750 s.f.office space; additional 7,500 s.f. warehouse
Vancouver Film Studios	PB	Vancouver	11	1 @ 18,040; 1 @ 18,000; 7 @ 15,000; 1 @ 12,500; 1 @ 6,750	State of the art soundstages w/ 40' ceilings; leading-edge technology; fitness facility; mills; helipad; extensive office space

*** KEY: "PB" = purpose built; "CV" = converted; "C/FX" = commercial & FX stages.**

[1] Excludes Vizon Scitec (formerly BC Research), which is a 520,600-gallon water tank.
[2] Formerly Lions Gate Studios. Purchased by Bosa Development in January 2006 and recently renamed North Shore Studios.

Source: British Columbia Film Commission, Individual facilities, and Economics Research Associates

Summary and Implications for the Okanagan Film Industry

The film industry in British Columbia is centered in Vancouver. To date, the Vancouver film production community has been highly dependent upon foreign (primarily U.S.), high-budget feature productions and television series. The region's ability to attract such productions has been a strategic combination of inputs, including: (a) the availability of world class crews, (b) large purpose-built stage space, (c) tax incentives, (d) the fact that British Columbia is situated in the same time zone as Los Angeles, and (e) daily non-stop air access from Los Angeles to Vancouver. The second and last two points give it a strategic advantage over the Eastern Canadian production centers in Toronto and Montreal. Additionally, the province also possesses more diverse geographical locations (e.g., coastline, desert in Osoyoos, etc.) than Ontario and Quebec and has not been impacted by union disputes that have recently beset these other two provinces.

Data from the BCFC and BC Film both indicate that service production activity in the Vancouver region is strong, despite the recent rise of the Canadian dollar that began in 2003. The recent rebound of film production in the British Columbia market could present some opportunities in the Okanagan Valley for both service productions (the largest users of stage space), in addition to higher budget domestic productions seeking stage space (e.g., the recent Canadian feature film,"Fido").

However, data the numbers of domestic feature film and television productions shot in the province have been sporadic and declining, particularly with regard to the total dollar volume of production. Figure 3 shows that between 2000 and 2005, the total dollar volume of domestic productions decreased by 46 percent, while the actual number declined by only 9 percent. This would indicate the Canadian productions are becoming increasingly budget-sensitive.

With regard to service production, discussions with various stakeholders and industry professionals based in Vancouver would suggest that majority of service productions shot on sound stages in the Lower Mainland are there not only to take advantage of the stages, but also the critical mass of production-related infrastructure including post production facilities, equipment, etc. that is missing in other parts of the province. Stakeholder discussions indicate that Canadian productions would be more likely to utilize stage space outside of the Lower Mainland since service productions either: (1) go to Vancouver to utilize the large, purpose-built stages (among other incentives), or (2) take advantage of B.C.'s numerous location opportunities and then shoot interiors on stages back in Los Angeles. Few such as "Fido" have utilized a combination of location shoots and temporary stage space. At this stage, it is highly unlikely at this stage in the Okanagan's film industry development (e.g., the absence of supporting infrastructure) that a production would shoot entirely on a stages or interiors there. However, as production activity increases in volume, this could change.

The following section presents an overview of recent production activity in the Okanagan Valley.

Section III. Production Activity in the Okanagan Valley

Introduction

In this section, ERA reviewed recent data provided by the Okanagan Film Commission ("OFC"). In the past, the Okanagan region has provided location opportunities for projects whose principal photography takes place in Vancouver, other parts of Canada and the U.S. More recently, however, it has attracted projects that were shot entirely on location in the area, as well as several feature films.

Visitor Infrastructure

The Okanagan Valley contains a critical mass of visitor-serving infrastructure and convenient air access to and from major Canadian and west coast U.S. cities. This is an important fact for visiting film crews.

The region is a popular tourist and second-home destination for residents of British Columbia, Alberta and the Pacific Northwest of the United States. There are currently an estimated 5,000 overnight hotel and condo beds[2] in the Thompson/Okanagan region, with plans to increase the bed base to 16,000 over the next 15 years. In addition to its scenic surroundings and recreational offerings, one of the major attractions of Kelowna is its annual climate. Annual precipitation is considerably less than in Vancouver (Figure 12), making the region an attractive area for location shooting.

Figure 12
Average Monthly Temperature & Rainfall
Kelowna, British Columbia

	Average High Temp. (°F)	Average Low Temp. (°F)	Precipitation (Inches)	Vancouver Precipitation (Inches)
Jan	31	19	1.3	5.7
Feb	35	20	0.9	4.8
Mar	47	28	0.7	4
Apr	58	34	0.6	2.7
May	68	42	0.9	2.2
Jun	74	49	1.2	1.9
Jul	81	53	0.8	1.2
Aug	78	51	0.9	1.5
Sep	68	44	1.1	2.3
Oct	56	36	1.0	4.6
Nov	43	30	1.3	6.1
Dec	34	24	1.5	6.8

Source: Weatherbase

[2] Estimate provided by *Business in VancouverMagazine/BC Advantage*, p. 38.

Production Activity

The Okanagan Film Commission's annual statistics for 2005 an approximate 240 percent increase in the value of production activity. These estimates are based on the industry averages and/or confirmed production numbers. Comparing the numbers of productions that were shot in the Okanagan for years 2004[3] and 2005, Figure 13 shows that the total number in 2004 (as of April 1st of that year) was slightly higher than in 2005.[4] In 2004, a total of 30 productions shot in the region, primarily television projects (12 total), for an average of 3.9 shooting days. The following year a total of 22 projects were shot locally, with the greatest percentage being documentaries (9 total), for an average of 5.6 shooting days.

Figure 13
Production Activity in the Okanagan
Kelowna, British Columbia

	2004*	2005	% Chg.	2006**
Feature	0	2	--	1
TV / Series	12	2	-83%	3
Documentary	4	9	125%	2
Stills/Print	0	2	--	0
Music Video	4	1	-75%	0
Commercial	7	3	-57%	0
Pilot	1	1	0%	0
Artisan	1	1	0%	0
Short	1	1	0%	0
Total Productions	30	22	-27%	2
Average Value	$72,300	$243,200	236%	n/a
Average Shoot Days	3.9	5.6	44%	10.4

*NOTE: Production activity in 2004 commences on April 1st.
**NOTE: Production activity in 2006 is through June 16th.

Source: The Okanagan Film Commission and Economics Research Associates

The higher number of shooting days in 2005 can be traced to one feature film, "Fido," which was shot entirely on location in Central and North Okanagan over a period of 50 days. The project is the largest independent Canadian feature to receive funding from Telefilm Canada and will premiere as the opening Canadian feature in the upcoming 2006 Toronto Film Festival. This project was sought after by more than four provinces before

[3] NOTE: These figures are as of April 1, 2004.
[4] NOTE: The "Finding America" TV series was excluded from these totals since it was not shot in the Okanagan Valley.

choosing the Okanagan, and is on records as largest budget independent feature in the province to date. At an estimated budget of CD $10.7 million[5], it is also by far the most expensive production to shoot in the region to date. "Fido" is a comedy-drama making its world premiere as the Canada First! opener on September 7, 2006 at the Toronto International Film Festival. The film has already sold into 20 territories.[6] Depending on its eventual success, this film could potentially serve as a catalyst to generate more production activity in the region and could also have a positive impact on tourism, similar to the impact "Brokeback Mountain" has had on production inquiries in Calgary.

As of mid-June 2006, a total of six productions have shot in the Okanagan region, including the feature film "Wind Chill," which shot over a period of 28 days in Peachland and Summerland. However, it is hard to establish trends or make conclusions about this limited data, especially since a significant percentage of production activity in Kelowna appears to take place during the summer months.

In summary, the majority of film productions that shot in the Okanagan between 2004 and 2005 are primarily location shoots for television series/projects and/or documentaries. As repeatedly noted during ERA stakeholder interviews in July, the attraction of a regular dramatic television series to the area could serve as an anchor for the establishment of a production facility. An example would be the Canadian television series, "Corner Gas" which is shot at Sask/Can Studios in Regina, Saskatchewan.

General Production Inquiries

General inquiries made to the Okanagan Film Commission have been gradually rising in the past three years. There have been large fluctuations in the categories of inquiries over the past few years. While 2005 saw more than seven times the number of community and presentation inquiries than in 2004, project inquiries were cut in half. Although the distribution of inquiries has varied recently, the overall numbers have stayed consistent with 2006 numbers on track to equal or increase 2005 numbers.

Location Inquiries

Location inquiries for varying production types have also slowly been increasing in the past few years. There were 155 inquiries for new projects in 2005, up from 148 in 2004. Year-to-date 2006 has already seen 65 new project inquiries, and the majority of requests come in the late summer and fall months. A large percent of projects are inquiring from previous years. Although the Film Commission only started tracking returning projects in 2004, the past two years have had high levels of returning inquiries with new work requested.

In terms of location inquiries since 2004, feature films and commercials have had the highest level of interest while TV Movies of the Week have had the least. This information appears in Figure 14 on the following page.

[5] Per conversations producer, Mary Anne Waterhouse.
[6] Etan Vessing, "Canadian films poised to break out at TIFF2006," *Playback*, September, 4, 2006, p. 3.

Figure 14
Location Inquiries by Production Type
2004-YTD 2006

	Feature Film	Commercial	TV Series	TV MOW	Documentary	Other	Total
2004							
New Projects	69	48	14	5	7	5	148
Returning Projects[1]	7	1	0	0	0	1	9
2005							
New Projects	58	45	15	4	10	23	155
Returning Projects	47	3	11	3	10	9	83
2006*							
New Projects	22	17	10	2	4	10	65
Returning Projects	20	0	3	0	1	3	27

[1] Only started tracking inquiries in October, 2004.
* Year to Date

Source: The Okanagan Film Commission and Economics Research Associates

Production Infrastructure

During stakeholder interviews, two weaknesses of the region that were frequently cited include the lack of local talent/crew and supplies/equipment. Though the Okanagan is easily accessible to Vancouver and Calgary, at present, there is no critical mass of production. As such, the majority of crew and supplies/equipment must be imported since crew members residing in the Okanagan have to travel for work, resulting in a shortage of available local labor. This leads to increased production costs for producers who must import available labor.

Due to the Okanagan's assets as a community, the region has attracted a contingent of established resident producers and talent work whose work is currently produced/shot entirely outside of the region. Examples include Gabriel Films North, which produces projects for The Discovery Channel (U.S.). Another segment of this growing residential market includes semi-retirees who previously worked in the film industry in Vancouver, Calgary and other established production communities. As this base of talent continues to grow locally, the Okanagan Valley has increased potential to generate more film product.

Linkages with Hi-Tech Companies

The Thompson Okanagan region contains the province's third-largest cluster of technology companies behind Vancouver and Victoria.[7] Many of these companies have linkages to the film industry. One example would be ITIVA, a hi-tech company that delivers full screen video over the Internet. The company is also currently working on several projects involving motion capture technology and is considering building a small stage or stages with green screen of several thousand square feet.

The Centre for Arts and Technology

The Centre for Arts and Technology ("CATO") is a two-year private college in Kelowna that offers professional diploma programs in the areas of 3D Animation, 3D Game Animation, Audio Engineering, Digital Filmmaking, Graphic & Digital Media Design, Event & Talent Management, and Information Technology. The Centre campus is situated in a 16,000 square foot space within a commercial building.

On-site facilities include a state-of-the-art digital recording studio and a small sound stage of approximately 2,000 square feet[8]. Situated across the street from the main campus, the stage will soon be shut down and converted to other uses. This represents another potential user of a proposed sound stage in the region.

Conclusions and Implications for Sound Stage Development

Based upon ERA's stakeholder interviews in Kelowna, the following strengths, weaknesses, opportunities and threats ("SWOT") have been identified for the region with regard to production opportunities. This SWOT analysis appears on the following page.

[7] *Business in VancouverMagazine/BC Advantage*, p. 32.
[8] ERA estimate based on site tour on July 7, 2006. CATO estimate is not available.

Figure 15
SWOT Analysis
Production Opportunities in the Okanagan Valley

STRENGTHS	WEAKNESSES	OPPORTUNITIES	THREATS
Diverse locations	Lack of available crew base	Increased demand for global content = more production opportunities	Globalization - emerging competitive production centers worldwide
Proximity to Vancouver	Lack of local suppliers/equipment	Presence of high-tech companies (streaming video, etc.)	Competitive threats from other Canadian provinces
Competitive tax credits - regional bonus	Lack of stage space or warehouse facilities	Growing base of resident talent relocating from Vancouver and other parts of Canada	Declining federal funding sources
No teamsters/flexible unions	Location opportunities mean that Okanagan is geared toward drama, a declining genre		Rising Canadian dollar for foreign service production
Diversity of hotel stock	Increasing dependence upon government funding sources for domestic productions		Rising land costs
Local labor training through Centre for Arts and Technology	Seasonality of hotel stock - difficult to get rooms during peak season		
Better climate than Vancouver			

Source: Economics Research Associates

Based upon ERA's stakeholder interviews and available quantitative data from the OFC, the following factors are included in our analysis for a potential production facility in the region:

- The demand for stage space and/or cover sets from projects either shooting or actively looking to shoot in the region appears to be sporadic
- There is currently a tight supply of available industrial space to accommodate any present demand for additional space
- There has been recent growth in local hi-tech companies such as ITIVA, which is looking for stage space of several thousand square feet
- CATO is going to be seeking available stage space to replace the small stage they will be losing

- There is strong current demand for stage space in Vancouver, particularly for foreign features

In the absence of a established television series, the demand for stage space in the Okanagan region is sporadic, meaning that construction of a sound stage would be a great sell, albeit one that is likely not to be highly utilized by service productions and higher-budget domestic shoots. The greatest numbers of productions shot locally in recent years were location shoots for television series and/or documentaries. However, interviews with producers would suggest that the presence of a sound stage would offer an advantage to producers who are also scouting other provinces such as Manitoba and Saskatchewan that offer stronger regional incentives <u>and</u> a sound stage.

Interviews with prospective user groups would suggest that local hi-tech firms, the Centre for Arts and Technology, and future film programs/collaborations with the UBC Okanagan, could generate consistent use of stage space. This is a key strength for the Okanagan, since local sources of demand are already in place. Also, since the Okanagan Valley is a fast-growing resident and tourist destination, it is likely that the region will begin to experience growing demand from local businesses for filmed product. In this sense, the Okanagan has the potential to receive increased future demand from both local and outside sources.

The following section looks at specific factors for sound stage development.

Section IV. Sound Stage Development

Introduction

This section presents a utilization forecast and development program for a motion picture complex for the Okanagan market. The goal of this analysis is to present a likely future estimate of use for a facility that is designed to best meet market demand in this region. This analysis is based on the overview of market conditions in the industry in general.

To date, the vast majority of productions that have shot in the Okanagan region have selected the area for its numerous location opportunities.

Location Factors

The filmed entertainment industry is a business about making story-telling profitable. Thus, generally speaking, no film, television show, or other media event can afford to put logistics entirely before the story. Certainly, stories must work around logistics, physical constraints, and costs; but ultimately, locations and facilities serve the needs of the script.

Productions move away from traditional production centers for varying reasons:

- ***Artistic***. Locations are chosen because of the needs of the script. If a script needs a town, forest, lakeside, or certain kind of coastline, the producer, location manager and/or production designer will search for a location that fits the project's artistic needs or the director's desire.

- ***Financial***. Sometimes a project's budget is such that financial incentives will prompt a company to take a production away from familiar, convenient locations and facilities. Often, the potential liability of being outside of one's familiar surroundings is enough to deter decision makers from this approach. In addition, unless the local labor and talent are expert, relatively cheap, and available, other costs such as travel, hotel, and per diem allowances will mount quickly, offsetting the intended savings.

- ***Preference/Whim***. If a director, producer, or other key individual decides he or she prefers a certain location or facility, then the production situation might change quickly and without notice. For example, while filming *Natural Born Killers*, Oliver Stone decided that he enjoyed being around the Chicago area. So at the last minute, production shifted from returning to Los Angeles where Stone had originally intended to shoot the sound stage work. The entire crew had to scramble to find the proper facilities in Chicago because Mr. Stone wanted to stay there. Admittedly, there are not many above-the-line talents with Mr. Stone's clout, but there certainly are several.

- ***Contractual***. Certain productions are simply obligated to use particular facilities. For instance, the episodic television series, *Party of Five*, was produced by High Productions, a wholly-owned subsidiary of Sony Pictures Entertainment (SPE). SPE obligated High Productions to use Culver Studios as a condition for financing. Similar arrangements exist with productions such as those developed and produced in Vancouver by Stephen Cannell.

Generally, the process involves more than just one of the factors listed above.

Location Shooting and the Importance of Sound Stages

Location shooting is becoming increasingly important in movie production, creating an impact around the country. Increased location shooting will likely lead to some additional demand for sound stage facilities in locations outside major production centers.

The quality and location of sound stage facilities do not necessarily indicate the quantity and type of production that will occur in a state. Sound stages outside of the major production centers tend to rely on a few production categories, such as local and regional commercial and television production, or even in-house projects, as the basis for operations, and count major motion pictures as a bonus. In addition, even when sound stages are available, productions will often use warehouses and other available buildings instead of sound stages. These alternatives are generally less expensive or offer special features not available on conventional stages, such as exceptional free-span dimensions or ceiling heights which are not presently available in the Okanagan market.

Demand Factors for Sound Stage Utilization

The use of soundstages represents the preferred method for producing the majority of higher-budgeted film and television products made today, and in the near future. A soundstage offers a filmmaker a protected and controlled environment. Driven by cost considerations or lack of space, however, many producers, use “fugitive” space as ad hoc stage space which is considerably less expensive. Examples of this space include vacant warehouses, factories and even schools or other institutions.

Primary Demand Criteria for Sound Stages

In general, the criterion cited often by producers as being of high importance in decision making regarding a particular stage is the availability, quality, and cost of local labor. The top ten criteria by which production sites are evaluated are as follows:

1. Availability, quality, and cost of local labor
2. Noise factors
3. Cost of stage rental
4. Quality of stage facilities
5. Proximity to desired locations
6. Vibration Factors

7. Cooperation of local and state government
8. Right-to-work environment for commercials
9. Grip and electric services/equipment offered
10. Favorable sales tax rate

Primary Users of Sound Stage Facilities

Looking at the primary users of sound stages by type of production, the following is a brief overview of the different types of production and utilization levels.

- ***Feature Films*** are heavy users of stage space not only because shooting is lengthy but also because substantial time is normally spent on set construction on the stages. In general, feature productions require large, clean spaces. With daily shooting rates running as high as several thousand dollars per day for major studio stages, feature filmmakers are often the only film producers who can afford the space. Their size requirements vary from 12,000 to 40,000 square feet.

- ***Movies of the Week*** except where economic conditions will allow low cost production environments, MOWs rarely if ever use sound stage space. In fact, one of the main sources of competitive advantage that Kelowna has in this segment is that substantial savings in production can be achieved relative to production in the U.S. Under these conditions, it becomes possible for MOW to use sound stage space.

- ***Television Series*** are perhaps the best source of steady income. Each half-hour episode takes an average of four days to shoot, while a weekly hour series takes approximately one week of shooting time, part of which is spent on location. A television series consists of 26 episodes; a single television series could be expected to use 130 stage days per year, in addition to set construction time which would add an additional ten rental days.

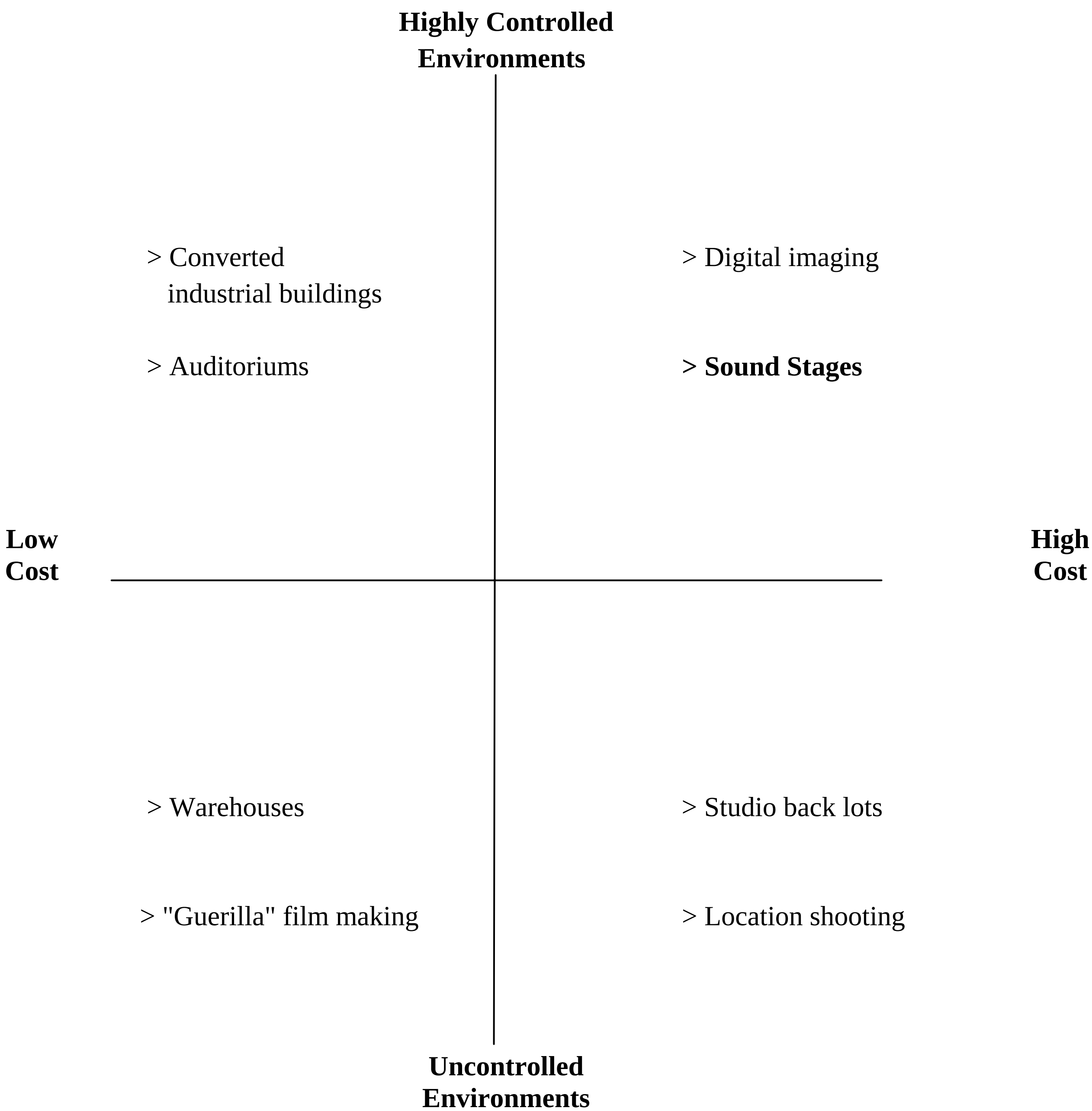
- ***Television Pilots*** for prospective series are similar to MOWs. Since their budgets are low, they try to avoid stage utilization and shoot as much as possible on location.

- ***Commercials*** tend to use smaller stages and tend to have the most stringent production requirements. While their requirements vary, commercial shoots utilize stages in the 5,000 to 7,000 square foot range.

Advantages of Sound Stage Utilization

Figure 16 shows the conceptual tradeoffs of the major types of physical production environments. A production environment geared more toward converted industrial buildings and auditoriums will yield lower returns while an environment geared more toward soundstages will yield higher returns.

Figure 16
Conceptual Map of Production Environments



Source: Economics Research Associates

The advantages of soundstages are primarily the flexibility, control and speed they offer. Lights and cameras can be easily rigged, power is available, sound-proofing prevents multiple takes by interfering external noise, the floor surface is smooth for dolly moves, and the walls are often movable, allowing for camera placement and movement. High ceilings allow aerial crane shots and set construction. Parking is usually available as well as office space and amenities.

Disadvantages of Sound Stage Utilization

The disadvantages of soundstages include the often-expensive construction of sets, and the daily price one must pay while the space is being occupied. As long as a producer occupies the space, even if principal photography is not occurring, the negotiated rate applies. In fact, the typically high rental rates usually keep soundstages out of the reach of many low cost productions.

Target Market Production Opportunities

Interviews with producers, crew members, and various stakeholders in the Okanagan and Vancouver film industry have indicated that feature films shooting in the region are primarily attracted to Okanagan's location opportunities, but that the ability to consistently attract and retain these types of productions is largely dependent on forces outside of the control of local industry participants, either in the private sector or through public policy interventions. Generally, large-budget projects (projects over US$50 million) typically are not highly sensitive to price incentives and are less likely to be swayed by the presence of public/private partnerships and related non-market support for the industry. While it is anticipated that the Okanagan region will continue to get its ongoing fair share of projects shooting in the region that may require a cover set or controlled environment, any motion picture production complex that was built primarily to serve this market would be subject to a great deal of volatility. This inconsistent market demand would make the facility unattractive from the point of view of private investment.

The Okanagan has yet to establish a history of consistent production such as an episodic television program. The commitment of an episodic television production can serve as an opportunity to secure an anchor tenant that can stabilize occupancy within a facility as well as generate demand for a sound stage and related services. In addition, these projects provide consistent, long-standing employment for the crew base and opportunities for suppliers and vendors. One example would be the Canadian children's television program "Mythquest." This model, perhaps, presents the best opportunity for local producers and the industry as a whole to capture specific market share.

Having said that, one of the key requirements for a community to support an episodic project over the long term is the presence of facilities. In some cases, fugitive, or ad hoc, space can be used. However, the long-term requirements of these projects generally require affordably priced, purpose-built sound stage space with enough flexibility to allow for multiple-set construction, and principal photography that can occur in more than one stage facility. For instance, the presence of the series in Regina "Corner Gas" has served to stabilize occupancy at the Sask/Can Studios, and has provided steady employment for the crew base of Saskatchewan.

Recommended Facility

In this analysis, ERA has not been commissioned to undertake a complete market analysis and full feasibility study. However, we have been charged with identifying likely sources of utilization and to suggest an appropriately-sized facility that would meet production demands. In this analysis, we considered two major sources of utilization: (1) use by location productions that film in the area on a transient basis, and (2) production demand generated internally within the Okanagan Valley. With this in mind, our initial analysis suggests the following major sets of potential users under each category.

Transient and Location Demand

In general, productions are attracted to the Okanagan Valley in order to take advantage of the scenic location opportunities that are available in the region, along with the advantages of a regional bonus that is available as part of the Province of British Columbia's incentive structure. The region has been an active site for occasional feature film production, although those are generally of modest scale and aimed at the Canadian market. Additionally, the area has been the site of production for a number of reality-based television projects, including *Making the Cut* and *X-Weighted*. Reality television is particularly well suited to both the cost of production and the geography, climate, and location opportunities that are available in the Okanagan Valley. This is the fastest growing segment of television production, and represents a fruitful source of potential new future business eventually developed in the Okanagan Valley. Generally, producers of reality television require little demand for stage space, but this segment may generate some additional utilization should a facility be available.

Internal Demand

The Okanagan Valley is developing as an important technology industry production cluster within the British Columbia economy. There are a number of firms that are active in the area that are currently engaged in motion capture and visualization technology. While ITIVA is currently the leading firm located in the area that has production demands that are related to their technology efforts, other potential users exist within the market and have the opportunity to be induced into the Okanagan Valley as part of an economic clustering or agglomeration of related activities. Typically these users require controlled environments for motion picture and still photography, and very often require these facilities on very short notice on a contingent or project-specific basis. Related to this technology-driven demand, there are also labor training and educational users located within the Okanagan Valley who might also be potential sources of demand. This includes the film production program at the Center for Arts and Technology, as well as the Okanagan campus of University of British Columbia.

At present, the Center for Arts and Technology uses an approximately 2,000-square-foot sound stage as part of their curriculum in a converted warehouse space across the street from the school, but that facility is slated for redevelopment and the school administration anticipates that they will no longer have access to this facility in the next 18 to 24 months. The UBC Okanagan is also considering the construction of a 30,000-square-foot creative and performing arts center that would be multi-use in nature and could potentially be used for film productions.[9] While the construction of this facility is contingent upon funding from an anonymous private donor, this facility could potentially be combined into a sound stage initiative.

Project Development Parameters

Given these general contours of the production market in the region, a modestly-sized facility that would be designed primarily to meet the needs of internal demand, while offering opportunities for external users, would most likely be the most fruitful development for sound stage development in the Okanagan Valley. In general, motion picture production facilities can work as operating businesses, that is to say, given appropriate levels of utilization, they are able to cover their operations costs with revenues greater than annual expenses. However, generally these facilities are not able to generate sufficient returns on the capital investment that is required in order to trigger conventional bank financing. This is why the overwhelming majority of sound stage development that occurs worldwide acts as some form of public/private partnership. It is likely that these kinds of structures will need to be explored in an eventual development program for the Okanagan Valley.

Because of the inability of sound stage facilities to have sufficient returns on capital investment, it is very important that any development program be as efficient as possible from a capital perspective. That is to say, it is very important not to overbuild any facility, and to allow for expansion over time if the market for additional space materializes. With these general principals in mind, it is possible to recommend the following development program for initial tasking in terms of their financial requirement for a facility in the Okanagan Valley.

Proposed Development Program

- Sound stages—two stages:
  --Stage One—12,000 sq.ft.
  --Stage Two—9,000 sq.ft.
- Management offices—2,000 sq.ft.
- Workshops—2,000 sq.ft.
- Production offices—2,000 sq.ft.

In general, it is not advisable to develop a project with less than two stages. It is necessary for most projects to be able to have a stage that is used for construction while shooting occurs adjacent. Similarly, the ability to use these stages as cover sets for outdoor location shooting when weather conditions would dictate, and to allow for smaller-scale interior constructions which would allow for efficiencies from a production team that is on location. This would represent a core, initial investment which would be able to meet the most immediate demands of existing users located in the Okanagan Valley, as well as cover the requirements of the vast majority of location-based productions coming into the region.

[9] Telephone conversation with Richard Belton, Dean – Faculty of Creative and Critical Studies, UBC Okanagan.

Figure 17 shows a hypothetical use profile for this complex in terms of both stage use and office use as a basis for estimating operations revenues for a potential facility. Note that the facility reaches a stage occupancy rate of approximately of 70 percent in Year 3, which is considered to be the first stable year, with the first two years representing "ramp up years" as it reaches stabilized operations. In general, because of scheduling and related issues of efficiency, it is difficult for sound stage of achieve occupancy above 70 percent, and, as such, is considered full occupancy for the purposes of establishing financial viability.

Figure 17
Stage Usage

YEAR		1	2	3
Stage Use				
	Shoot	240	276	474
	Set/Strike	20	17.8	31.7
	Total	260	293.8	505.7
Total Stage Occupancy		36%	41%	70%
Office Use				
	Calendar Prod Days	65	60	106
	Total Office Days	148	153	229

Source: Economics Research Associates

Figure 18 displays a potential rate card for use of the facility, taking into account typical film industry conventions, which include differing day rates for shooting versus set and strike days on stages, as well as a discount factor which is an endemic part of the industry. In general, motion picture production facilities make a substantial portion of their revenue off of reselling of utilities (hydro) and for providing other additional services within the stage. At the same time, there are revenue sources from the rental of production office by transient production, both those using the stages and those that are simply location-based productions in the Okanagan Valley that not only rent the facility space, but also furniture, equipment, and related workshops and equipment, are an additional important source of revenue for set construction and activities related to production on the stages.

Figure 19 translates these rates to revenues on an annualized basis going out to first stabilized operating year in Year 3, represented in thousands of Canadian dollars. These revenues are compared against expenses, which are illustrated in Figure 20. Expenses include management salaries, operating costs for administration, and use of the facility for both stages, office space, and workshops and equipment.

Figure 18
Rates (Canadian Dollars)

YEAR:			**1**	**2**	**3**
STAGE					
Rental					
Stage 1					
	Shoot	per Shoot Day	$700	$700	$700
	Set/Strike	per Set/Strike Day	$420	$420	$420
Stage 2					
	Shoot	per Shoot Day	$500	$500	$500
	Set/Strike	per Set/Strike Day	$300	$300	$300
Discount Factors					
	All users		0.80	0.80	0.80
Utilities/Services					
Utilities		of Stage Rental Revenue	30%	30%	30%
Services		of Stage Rental Revenue	8%	8%	8%
PRODUCTION OFFICES					
Production Offices		per Office Day	$225	$225	$225
Furniture, Equip. Rental		per Office Day	$75	$75	$75
WORKSHOPS & EQUIPMENT					
Stage Equipment		per Set/Strike & Shoot Day	$134	$134	$134
Workshops					
	All users	per Set/Strike & Shoot Day	$223	$223	$223

Source: Economics Research Associates

Figure 19
Revenues (Canadian Dollars, In Thousands)

YEAR			1	2	3
STAGE					
Rental					
	Stage 1				
		Shoot	67	67	118
		Set/Strike	3	3	5
	Stage 2				
		Shoot	48	62	106
		Set/Strike	2	2	4
	Subtotal		121	135	232
Utilities/Services					
	Utilities		36	40	70
	Services		10	11	19
		Subtotal	46	51	88
Total Stage			167	186	320
OFFICES					
	Prod				
	Offices		33	34	51
	Furn, Equip. Rental		11	11	17
		Total	44	46	69
WKSHP & EQUIP					
	Equipment		35	39	68
	Workshops		58	65	113
		Total	93	105	180
GRAND TOTAL			**304**	**336**	**569**

Source: Economics Research Associates

Figure 20
Operating Expenses (Canadian Dollars, in Thousands)

					1	2	3
Annual Growth Salaries			3.0%				
Year:					**1**	**2**	**3**
STAGE							
	Salaries		FTE	Salary			
		Executive Mgmt	1	$75,000	$75.0	$77.3	$79.6
		Office Manager	1	$40,000	20.0	20.6	21.2
		Clerical / Reception	1	$28,000	28.0	28.8	29.7
		Stage Managers	1	$55,000	55.0	56.7	58.3
		Taxes, Benefits	25%	of salaries	44.5	45.8	47.2
		Subtotal			222.5	229.2	236.1
	Operating Costs						
		Utilities	50%	of utilities rev	18.1	20.2	34.8
		Other Operating Expenses	16%	of stage rev	26.7	29.7	51.3
		Marketing/Promotion/Travel	7%	of stage rev	11.7	13.0	22.4
		Professional/Legal Fees	4%	of stage rev	6.7	7.4	12.8
		Subtotal			63.2	70.4	121.3
	Total				**285.7**	**299.5**	**357.4**
OFFICE SPACE							
	Operating Costs						
		Utilities	10%	of office rev	4.4	4.6	6.9
		Other Operating Expenses	30%	of office rev	13.3	13.7	20.6
		Subtotal			17.7	18.3	27.5
	Total				**17.7**	**18.3**	**27.5**
WORKSHOPS AND EQUIPMENT							
	Operating Costs						
		Utilities	20%	of workshop rev	11.6	13.1	22.5
		Other Operating Expenses	25%	of total revenue	23.1	26.1	45.0
		Subtotal			34.7	39.2	67.5
	Total				**34.7**	**39.2**	**67.5**
TOTAL EXPENSES					**$338.2**	**$357.1**	**$452.4**

Source: Economics Research Associates

Figure 21 presents capital costs associated with this project, which would be approximately C$4.1 million, exclusive of any land costs. We have structured the analysis to identify a value associated with extra market support in the form of reduction of capital costs, that would at a minimum bring the internal rate of return over a 10-year time period for the project to a break even point, or a 0 IRR. This would not be a high enough threshold for convention bank financing, however, could be the basis of a joint public/private partnership. Under this scenario, it would suggest a non-market contribution from some public source of a minimum of approximately C$2.5 million, exclusive of land, which would leave the total requirements of C$1.5 million from a private source, assuming a debt equity ratio of 60 to 40 percent. This would yield an annual debt service over 20 years at 8 percent interest of C$93,000.

Figure 22 presents a total cash flow combining revenues against expenses to present earnings before interest, taxation, depreciation, or amortization for the proposed development growing out over 10 years. The project would operate as a negative net cash flow after debt service under these assumptions for the first two years, and then would turn a profit in Year 3. Operations surpluses would run about 21 percent of revenue after stabilizing in Year 3. The net cash flow produces an internal rate of return of 0 or break even based on the financing assumptions presented above.

Summary and Conclusions

This information has largely been provided at the level of viability. In other words, this analysis does not possess a detailed utilization forecast by types or source of production (e.g., service versus domestic). Rather, it attempts to put a price tag on a suitably-sized, highly efficient, and targeted capital program that would allow the motion picture production industry and related technology enterprises that currently exist within the Okanagan Valley to have a base from which their activities could expand over time.

The presence of a sound stage facility in the market would allow the Okanagan Valley to improve its competitive position vis-à-vis other filming locations, both elsewhere in British Columbia and throughout Canada as a whole. As a result of this preliminary analysis and conversations with stakeholders in the Okanagan Valley and Vancouver, ERA believes that a small production facility with two stages, production and management offices would best suit the demand from local companies in addition to being an asset primarily to Canadian film and television productions seeking stage space.

Figure 21
Capital Requirements and Finance Assumptions
(Canadian Dollars, in Thousands)

CAPITAL COSTS

Hard Construction	**SF**	**Cost per SF**	**Cost (000s)**
Stage 1	12,000	$125	$1,500
Stage 2	9,000	125	1,125
Management Office	2,000	175	350
Workshops	2,000	110	220
Production Offices	2,000	175	350
Subtotal			$3,545
Soft	15.0%	of hard	$532
Total Construction			$4,077

CAPITAL REQUIREMENTS AND FINANCING

Land		$0
Construction (Hard/Soft)		$4,077
Working Capital		$0
Subtotal		$4,077
Capital Off-set		$2,560
Total Requirements		$1,517
Debt/Equity		
Debt	60.0%	$910
Equity	40.0%	$607
Net Debt		$910
Net Equity		$607
Loan Term (years)	20.0	
Interest Rate (annual)	8.0%	
Debt Service	$93	
Asset Value		
Cap Rate	12.0%	
Sales Cost	2.0%	

Source: Economics Research Associates

Figure 22
Cash Flow (Canadian Dollars, in Thousands)

	Const	1	2	3	4	5	6	7	8	9	10
REVENUES											
Stage											
Rental		121.0	134.6	232.2	239.2	246.3	253.7	261.3	269.2	277.3	285.6
Utilities		36.3	40.4	69.7	71.7	73.9	76.1	78.4	80.8	83.2	85.7
Services		9.7	10.8	18.6	19.1	19.7	20.3	20.9	21.5	22.2	22.8
Office		44.3	45.8	68.6	70.7	72.8	75.0	77.3	79.6	82.0	84.4
Wkshp & Equip		92.6	104.6	180.0	185.4	191.0	196.7	202.6	208.7	215.0	221.4
Total		303.8	336.2	569.1	586.2	603.8	621.9	640.5	659.8	679.6	699.9
EXPENSES											
Stage		285.7	299.5	357.4	368.1	379.2	390.5	402.3	414.3	426.8	439.6
Office		17.7	18.3	27.5	28.3	29.1	30.0	30.9	31.8	32.8	33.8
Wkshp & Equip		34.7	39.2	67.5	69.5	71.6	73.8	76.0	78.3	80.6	83.0
Land Rent		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Property Tax		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total		338.2	357.1	452.4	465.9	479.9	494.3	509.1	524.4	540.2	556.4
EBITDA		(34.3)	(20.9)	116.7	120.2	123.9	127.6	131.4	135.3	139.4	143.6
% of Revenues		*-11%*	*-6%*	*21%*	*21%*	*21%*	*21%*	*21%*	*21%*	*21%*	*21%*
Investment	$607										
Debt Service		$93	$93	$93	$93	$93	$93	$93	$93	$93	$93
NET CASH FLOW	(607)	(127)	(114)	24	28	31	35	39	43	47	51
Asset Value											1,173
Less: Loan Balance											622
Net Asset Value											551
Cash Flow	(607)	(127)	(114)	24	28	31	35	39	43	47	602
IRR	**0.0%**										

Source: Economics Research Associates

Stakeholder Interviews

Name	Organization	City
Adair, Tom	B.C. Council of Film Unions	Vancouver
Belton, Robert	Dean - Faculty of Creative and Critical Studies - UBC Okanagan	Kelowna
Brown, Lynda	New Media B.C.	Vancouver
Buhler, Claudia	City of Kelowna	Kelowna
Callary, Catherine	Tourism Kelowna	Kelowna
Carr, Warren	Independent Producer	Vancouver
Croome, Susan	B.C. Film Commissioner	Vancouver
Davis, Darone M.	ProDigital Film Studios, Inc.	Penticton
Dow, James	CHBC Television	Kelowna
Dugdale, Rick	Dan Petrie Jr. and Co. (Los Angeles)	Los Angeles
Fine, Robert	Economic Development Commission, Regional District of Central Okanagan	Kelowna
Forai, Dave	Greater Vernon Services	Vernon
Frankell, Bruce	Scenic Painter - Crew	Kelowna
Geertz, David	Iconic Matters	Penticton
Greaves, Russ	Shaw Cablesystems G.P., Okanagan Film Commission Chairman	Kelowna
Hawkins, Crawford	Director's Guild of Canada, B.C.	Vancouver
Hourigan, Karl	Centre for Arts and Technology	Kelowna
Hrynuik, Ron	General Manager, The Bridge Studios	Vancouver
Jubenvill, Ken	Director/Producer	Kelowna
Mandziuk, Glenn	Executive Director, Destination Osoyoos	Osoyoos
McCarthy, Cal	SW Audio	Kelowna
McIlvride, David	Gabriel Films North, Inc.	Kelowna
Mitchelle, Pete	Vancouver Film Studios	Vancouver
Moore, Taylor	ITIVA	Kelowna
Murray, Tim	Okanagan Film Commission Board of Directors	Kelowna
Pielak, Nolan	Dream Entertainment (Los Angeles)	Los Angeles
Runnalls, Rodney	RR Pro Productions	Kelowna
Scherberger, Elizabeth	1st Assistant Director - Crew	Kelowna/Toronto
Shaak, Sara	Film Commissioner, Okanagan Film Commission	Kelowna
Sutherland, Wes Paul	Skeena Pictures Inc./Okanagan Society of Independent Filmmakers	Kelowna
Taylor, Tom	ITIVA (Founder)	Kelowna
Theodosakis, Nikos	Director/Entrepreneur	Kelowna
Waterhouse, Mary Anne	Anagram Pictures (Producer of "Fido")	Vancouver
White, Kevin	Budget Production Services (vehicular transport)	Kamloops
Wisebeck, John	Okanagan Film Commission Board of Directors	Kelowna
Wong, Robert	Director, Tax Credit Administration & Marketing (British Columbia Film)	Vancouver