

Pacific Sport Institute

Economic Impact

*Camosun College
Educational Research
& Development*

Pacific Sport Institute Economic Impact *Highlights*

The Pacific Sport Institute will have a total economic impact on the Victoria region of over \$25.8 million per year.

The equivalent of 420 full time jobs will be supported through Institute-related spending in the region.

Taxation revenue resulting from Institute-related spending will exceed \$7.9 million per year.

The Pacific Sport Institute will serve over 500 students in regular programs and over 600 athletes in sport development activities.

Construction of the Institute will generate more than 250 person-years of employment and over \$58 million in local economic activity.

The Economic Impact Of the Pacific Sport Institute

I. PURPOSE

In 2003 Camosun College and PacificSport Victoria developed an initial vision for a unique “institute for sport, learning and leadership”, encapsulated in a memorandum of understanding. This institute, now referred to as the Pacific Sport Institute, is envisioned to include a “student/athlete residence, sport facilities, sport services and applied academic programs” and will be located at Camosun College’s Interurban Campus. It will serve the local and regional communities, as well as meet the needs of national and international high performance athletes. Although some programming has already commenced, the opening of the Institute, housed in its new building, is scheduled for the fall semester of 2008.

This study seeks to assess the economic impact of the Pacific Sport Institute on the provincial economy, and in particular on the regional economy of the Victoria area. It relies on the proven methodology of the classic "Impact of Regional Spending" type of analysis, in reference to both sport and educational organizations. It clearly demonstrates the considerable impact and positive benefits the Pacific Sport Institute will have on Victoria’s regional community and on the economic lives of students and athletes.

II. METHODOLOGY

In 1971 Caffrey and Issacs in their work "Estimating the Impact of College or University on the Local Economy", described what has become the classic methodology of the "Spending Impact" type of model. It has been adopted as at least one component of most of the economic impact studies produced by educational institutions in the past three decades, and is the type of economic impact study familiar to most readers.

In the first stage of this methodology the initial spending of the institution is described in its various categories. To this is added the expenditures of students and visitors (and in this case athletes) to obtain an estimate of the total "cash flow" into the regional economy provided by, or as a result of, the activities of the institution. In the second stage of the analysis, the stimulating effects of these expenditures on business and employment within the local economy are acknowledged. Here a multiplier is applied to estimate the total first and second order contributions of the institution to the economy in any given year. The model therefore demonstrates the immediate benefits of the institute within the region and the province.

III. IMPACTS OF ACTIVITIES AND SPENDING IN THE REGION

A. Pacific Sport Institute Direct Spending

Facility Operation

A preliminary annual operating budget has been prepared for the Institute facility and these expenditures are summarized in the following table:

Pacific Sport Institute Facility Operation

Function	Expenditure
Operational Staffing	\$650,000
Research & Innovation Pilot	\$25,000
Community Programs	\$194,000
Security & Special Service	\$66,000
Janitorial and Maintenance Staffing	\$265,000
Total Personnel	\$1,200,000
Utilities	\$128,000
Marketing, Communications & Fundraising	\$70,000
Office, Legal & Insurance	\$62,000
Contingency	\$20,000
Total Non-Personnel	\$280,000
Grand Total	\$1,480,000

As is seen, these expenditures include both personnel and non-personnel components. The personnel component is largest at \$1,200,000 per year or 81% of budget while the non-personnel component comprises \$280,000 or 19% of total. It is expected that approximately 4.5 FTE staff will be employed in janitorial and maintenance functions and approximately 5.0 FTE staff in facility administration and operations.

Educational Programming

The Pacific Sport Institute will initially host educational programming in six program areas. The volumes of activity in terms of Student FTEs, and anticipated educational expenditures are summarized in the following table:

Pacific Sport Institute Educational Programming

Program Area	FTE Students	Total Educational Expenditures
Diploma Sport Management	140	\$1,155,000
Exercise & Wellness	140	\$1,155,000
Physio & Related Therapies	90	\$742,500
Applied Degree Sport Leadership	70	\$577,500
Coach & Athlete Development	70	\$577,500
Community Ed General	35	\$199,500
Total	545	\$4,407,000

These expenditures, totaling \$4,407,000 per year, will cover the total instructional costs of programming in the institute. Of this, approximately \$3,085,000 will be spent on direct instruction, while the remainder will be expended on instructional and student support activities, and on program administration. These expenditures will support the activities of approximately 40.0 FTE faculty and support, library and administrative staff.

Sport Science and Medicine

In addition to facility operations and educational programming the Pacific Sport Institute will support the activities of 11 Sport Scientists and 5 Sport Medicine professionals. The majority of these will be professional practitioners who will work out of the facility in various partnerships and collaborations with the Institute, as well as privately. Initial expenditures in these areas are expected to total over \$1,920,000 per year.

Innovation Chair in Sport Technology

The establishment of an Innovation Chair in Sport Technology will be an integral component of the Pacific Sport Institute. Funded in part by the Leading Edge Endowment Fund, the mission of the Chair will be, through research and development, the creation, application and commercialization of sport technology. The initial proposal is for an endowment of \$2.5 million, leading to an eventual annual expenditure of \$560,000 on both research personnel and equipment. This activity is likely to have significant staffing implications but these are difficult to quantify at this time.

B. Student and Athlete Spending

Program Enrolments

As noted above it is planned that the Institute will initially enroll 545 FTE students across six program areas when its profile is fully operational. This figure includes both full and part-time students in an annual “full time equivalent” calculation.

Student Expenses

For the purposes of this analysis we consider only the living expenses of students, since expenditures for tuition, books and materials are accounted as revenue in the college budget. In this regard the best basis for estimating student spending in Victoria is provided by Camosun College's Financial Aid department. Departmental staff surveyed average costs in the Victoria area for student loan purposes and to help students estimate their financial requirements for the school year. According to these surveys, non-educational costs for a single student range from \$980 to \$1,140 per month, depending on accommodation, and from 1,250 to 1,560 for a student with a single dependent. This compares conservatively to figures used by the Canadian Federation of Students of \$1,200 per month on average for single students and \$1,610 for a student with dependents.

The following additional assumptions are employed in estimating college student expenditures in the region. Data is obtained from internal surveys and from administrative systems:

1. Approximately 20% of college students have one or more dependents; 80% are single.
2. The majority of Institute programs will be ten months in duration, including a two month practical component.
3. We employ a "steady state" enrolment of 545 for the September to June period only, despite the likelihood of some Summer enrolment.
4. Cost estimates are based on a conservative single student expenditure of \$980 per month or \$8,820 for a school year; and \$1,250 per month for students with dependents (regardless of how many) or \$11,250 per year.

The following table shows the results of student spending calculations. The very conservative estimate is that student spending within the Victoria region will exceed \$5.07 million over the course of the academic year.

Pacific Sport Institute Student Spending

	Students	Annual \$	Total Spending
Single	436	\$8,820	\$3,845,520
With Dependents	109	\$11,250	\$1,226,250
Total	545		\$5,071,770

Athlete and Visitor Spending

Pacific Sport currently supports some 500 athletes, and significant growth is expected with development of the Institute as it attracts participants from across the province and the nation and around the world. It is not unreasonable to expect that this number will grow by at least 20%, to 600, as the Institute becomes fully operational. At least 50% of these athletes are in Victoria for 8 months or more, while others will stay for varying lengths of time depending on their activity. An average stay of four months duration is not unreasonable for this latter group. All athletes' spending while at Pacific Sport Institute will also contribute to the regional economy. Many athletes may live in a "Sport House" residence being contemplated or in host-family settings, while others will seek private accommodation. It is anticipated that athletes' costs may be similar to students', which we could estimate at \$7,840 for long stay (average 8 months) and \$3,920 for short stay (average 4 months).

It is also expected that the presence of the athletes, as well as competitions and events, will attract additional visitors to the region. It is difficult to anticipate the impact of this, but an assumption that each athlete might attract an average of two one-week visits per year – at an average cost of \$2,100 per visit - might not be unreasonable.

The following table summarizes athlete and visitor spending in the Victoria region as a result of the Institute. The again conservative estimate is that this spending will exceed \$5.3 million over the course of a year.

Pacific Sport Institute Athlete and Visitor Spending

	Numbers	Annual \$	Total Spending
Long Stay	300	\$7,840	\$2,352,000
Short Stay	300	\$3,920	\$1,760,000
Visitor	600	\$2,100	\$1,260,000
Total	1,200		\$5,372,000

C. Summary of Spending (First Round)

The following table summarizes the direct or "first round" spending impacts within the Victoria region related to Pacific Sport Institute's presence.

Pacific Sport Institute Impacts of Spending Summary

Type of Spending	Regional Spending
Operations	\$1,480,000
Educational Programs	\$4,407,000
Sport Science & Medicine	\$1,920,000
Innovation Chair Activities	\$560,000
Student Spending	\$5,072,000
Athlete & Visitor Spending	\$5,372,000
Total	\$18,811,000

D. Economic Impact

As the above table summarizes, the spending impact resulting from Institute activities is \$18,811,000 per year in total, showing the substantial community presence it would have.

The \$18.81 million in annual expenditures represents Pacific Sport Institute's initial or direct economic impact within the local economy. Economists also recognize that spending has other secondary effects, in stimulating business and industry and in making further economic activity possible. This stimulating effect is often referred to as "induced income", and is estimated in the use of an income multiplier.

The multiplier concept works as follows: for each dollar of initial spending in the Victoria economy, a proportion is spent again within the area for further goods and services. The remainder is removed from the economy in the form of savings, taxes and spending on goods and services outside the economy. In theory this process continues through several rounds of activity with diminishing increments at each stage. However in our study we have not gone beyond the secondary effects of spending, for a conservative estimate.

CH Davis (in his 1986 article "Income and Employment Multipliers for Seven British Columbia Regions"), has calculated the Victoria area multiplier at 1.37. This is a highly conservative multiplier: many studies, particularly in the US, cite multipliers ranging from 1.5 to 2.8. None-the-less, using this income multiplier on Pacific Sport Institute's first round regional spending impact (of \$18.81 m), we see that the Institute's total Economic Impact on the region would be \$25,771,070 per year.

The Pacific Sport Institute indeed represents a substantial economic benefit to, and investment in, the Victoria community.

E. Employment and Taxation Returns

These expenditures have employment and taxation benefits as well. In the same way that income multipliers are used to estimate the stimulating effects of spending on further economic activity, employment multipliers (impact ratios) can be used to estimate the secondary employment effects of spending. Both indirect and induced effects are recognized, stemming respectively from the purchases and spending made directly by the institute in the community, and from the secondary effects of employee spending also within that community.

We noted in the sections above that a total of 65.5 FTE staff will be employed in the activities of the Pacific Sport Institute, including facility operation, educational programming, educational support services, sport science, and sport medicine. BC Stats has calculated employment impact ratios for BC regions and economic sectors, and cites a 1.51 ratio for the public sector in the Victoria region, including indirect and induced

effects. Thus for every job directly generated by the Institute 0.51 additional jobs will be generated in the community, or a total of 33.4 additional jobs.

As well, other jobs will be created in the community stemming from the expenditures of students, athletes and visitors associated with the Institute. We can calculate an employment multiplier for this spending from Census data, using the average earnings per worker in the region of \$31,757 (Statistics Canada, cited in *Capital Region Trends* vol 19.1). This yields an average of 31.5 person-years of employment per million dollars of economic activity generated. Applying this divisor to the student, athlete and visitor spending from Pacific Sport Institute (of \$10.44 million) results in an employment benefit of 329 equivalent jobs. Adding this to the direct, indirect and induced employment generated by Institute operations, we see a total employment impact on the region of 421 equivalent jobs.

The taxation benefits are also substantial. If we assume that in some way or another all of the expenditures of the Institute represent a taxable income to the recipient, we can calculate this benefit at conservative rates. Using the average combined personal tax rate for 2006 as our conservative estimate, the Institute's first round expenditures in the region (\$18.81 million) would generate a minimum of \$5.82 million in tax revenues to government each year. Considering both primary and secondary spending (\$25.77 million), a total of \$7.96 million in taxation would be generated per annum.

F. Capital Expenditures

The cost of building the Pacific Sport Institute facility, including site infrastructure and fields, has been identified as \$42.75 million, and it is proposed that costs will be shared by the Federal and Provincial governments, corporate sponsorship, and Camosun and PacificSport Victoria philanthropic fundraising.

This spending will provide a significant economic benefit for construction-related companies, a wide variety of suppliers, and many trades, among others. We can apply the multiplier used above to the capital expenditures to gauge the impact of construction on the local economy. With capital costs totaling \$42.75 million and a multiplier of 1.37, we see that the impact of construction is \$58,567,500 within the region.

In addition there is a considerable employment benefit resulting from the building project. The construction of the Pacific Sport Institute is expected by project managers to generate 156 person-years of employment directly. BC Stats cites an indirect and induced employment ratio of 1.60 for the construction sector in the Victoria region, and using this multiplier we see that a total of 250 person-years of employment are generated by the capital project.

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