THE UNIVERSITY OF BRITISH COLUMBIA

REQUEST FOR DECISION

FORWARDED TO:

BOARD OF GOVERNORS ON RECOMMENDATION

OF PRESIDENT STEPHEN J. TOOPE

APPROVED FOR SUBMISSION:

Stephen J Toope

DATE:

PRESENTED BY: Dave Farrar, Provost & Vice President Academic

Doug Owram, Deputy Vice Chancellor & Principal, UBC

Okanagan

Pierre Ouillet, Vice President, Finance, Resources & Operations

Paul Smith, Vice Provost & Associate Vice President, Academic

Facilities & Enrolment

John Metras, Managing Director, Infrastructure Development

Peter Smailes, Treasurer

DATE OF MEETING:

June 12, 2012

SUBJECT:

UBC Five-Year Capital Plan 2013/14 - 2017/18

DECISION REQUESTED:

It is recommended that Board approval be granted to submit

the UBC Five-Year Capital Plan (2013/14 - 2017/18) to the

Ministry of Advanced Education.

EXECUTIVE SUMMARY:

In response to the Ministry of Advanced Education (AVED) request to post secondary institutions for their five-year capital plans to be submitted by June 15, 2012, UBC has selected high priority academic projects which are currently in planning and have not yet been put forward for Board approval. These capital investments are targeted to achieve key Place and Promise goals with a specific focus on student learning, student experience, international engagement and research excellence.

UBC will submit a focused, and jointly funded Capital Plan for the next five years along with a required summary of UBC's Major Ongoing/Planned Self-Funded Projects. The five-year plan reflects the challenging Provincial fiscal context and the Provincial focus on international education, economic development, jobs, families, health, and facility asset renewal.

ORIGIN OF REQUEST AND ADVANCED CONSULTATION:

The Ministry of Advanced Education (AVED) has requested Five-Year Capital Plan submissions from all public post-secondary institutions in order to create its 2013/14 Consolidated Capital Plan and to enable the Ministry to develop capital priorities for future consideration. The Plan is to be submitted to AVED by June 15, 2012. Board of Governors approval is required for the submission.

The proposed UBC Five-Year Capital Plan includes priority academic projects totaling \$363.6 million. Within that amount UBC will ask the Provincial government to contribute \$136.7 million in funding and proposes to commit \$226.9 million of UBC's own resources. An additional request for \$19.0 million in government funding for energy conservation projects will also be made under a separate Capital Innovation Fund category.

The UBC Five-Year Capital Plan submission was prepared by Infrastructure Development in consultation with the Executive, Provost's Offices (Vancouver and Okanagan), Campus & Community Planning and Treasury.

It should be noted that any project in the Five-Year Capital Plan submission that may ultimately be selected to move forward will need to be separately reviewed and approved by the Executive and Board of Governors through the standard UBC capital project approval process.

UBC Five-Year Capital Plan: Priority Academic Projects

The UBC Five-Year Capital Plan includes three strategic academic projects which support UBC priorities and focus on Place and Promise goals of student learning, student experience, international engagement and research excellence. The proposed projects also align with Provincial government priorities, in particular international education, economic development and facility asset renewal. In the preparation of the plan, the long range UBC 20-Year Capital Plan was updated to reflect current priorities.

As careful prioritization of proposed capital projects is critical to ensure that limited capital is directed to help UBC achieve its goals, these projects have been ranked to align with UBC's strategic objectives. The proposed projects support a vision for the transformative enhancement to student learning and experience through international engagement and integrated learning and research environments. The projects proposed are shown in Table 1 below and described in more detail in Attachment 1: UBC Five Year Capital Plan - Priority Academic Projects.

Table 1 – Priority Academic Projects

P	riority	Project	Campus	Delivery	Cost	Funding	Financing	
	1	Pathways College/ Global	UBCV	2016	\$204.1m	Government \$39.55m	Trek	
		Student Centre ¹	UBCO			SHHS/Pathways \$164.55m		
	2	Undergraduate Life Sciences Teaching Labs	UBCV	2015	\$72.0m	Government \$36.0m	Working	
						Pathways \$36.0m	capital	
3	3	Community Health Sciences	UBCV	2015	\$87.5m	Government \$61.15m ²	Working	
						Fundraising \$26.35m	capital	
					\$363.6m			

¹⁻ International Pathways Program (IPP) infrastructure project includes Global Student Centre (Old SUB Renew), Orchard Commons Student Housing, UBCO Mixed Use Classroom Facility and UBCO Student Housing Phase 5.

^{2 -} Government contribution to Community Health Sciences is proposed to come from the BC Ministry of Advanced Education (\$26.35m), BC Ministry of Health (\$30.0m) and CFI (\$4.8m).

UBC Five-Year Capital Plan: Capital Innovation Fund Projects

The Provincial government has a created a separate fund for projects that produce a positive return on investment over the lifecycle of the capital asset (e.g. energy conservation projects). This will be a separate component of Five-Year Capital Plan submission and will require the Board of Governors' approval for submission to government. The Capital Innovation Fund focuses on sustainability projects that reduce electrical and thermal energy use and contribute to overall reduction in campus GHG emissions. The projects proposed are shown in Table 2 below and described in more detail in Attachment 2: UBC Five Year Capital Plan – Capital Innovation Fund Projects.

Table 2 – Capital Innovation Fund Projects

Priority	Project	Campus	Delivery	Cost	Funding	Financing
1	Campus Lighting Retrofit	Lighting Retrofit UBCV 2013-15 \$9.0m Government \$9.0m		Government \$9.0m	n/a	
2	Green Labs	UBCV	2013-15 \$10.0m Government \$10.0m		n/a	
				\$19.0m		

Attachments

- 1. UBC Five-Year Capital Plan Academic Priority Projects
- 2. UBC Five-Year Capital Plan Capital Innovation Fund Projects
- 3. UBC Major Ongoing/Planned Self-Funded Projects (>\$5 million)

UBC FIVE-YEAR CAPITAL PLAN – PRIORITY ACADEMIC PROJECTS

Pathways College/Global Student Centre

Estimate \$204.1 million

UBC serves a local, national and international community and efforts are currently underway to strategically expand international student enrolment so that campus life and the student experience are universally enhanced. UBC's International Pathways Program (IPP) as an adjunct to our expanding International Students Initiative (ISI) will allow UBC to significantly diversify the student body and increase the number of talented international students at UBC. The IPP will combine innovative teaching techniques with cultural and language support to provide a transformative program that will allow us to invite promising students from a more diverse array of countries while maintaining our base of direct entry students from traditional sources.

This proposal expands international student initiatives and strategically co-locates administrative units currently supporting undergraduate students across UBC. As student enrolment grows and campus life becomes more complex, UBC recognizes the need to support all students as they progress from registration to graduation. Student support will become more personalized. Much support currently comes from the Registrar's office which, for example, has developed a sophisticated approach to admissions that involves an application based not only on grades but also on personal experiences and non-academic achievements. In future, incoming first-year students to the Vancouver campus will be assigned their own student service specialist to guide them throughout their entire UBC career, making UBC the first large university in Canada to implement a personalized service model.

IPP is a transformational, international student strategy to energise the global engagement of the UBC community and improve access for International and Aboriginal students. It will deliver unique, integrated learning experiences and expand overall teaching, research and student services capacity. Comprised of four facility components, the proposed capital project includes enhanced and expanded academic, student service and student housing facilities on both the Vancouver and Okanagan campuses to accommodate international student growth.

At the UBC Vancouver campus, the existing former Student Union Building (SUB) will be renovated as a one-stop shop for program support services, administration and health and wellness programs. Orchard Commons at the Vancouver campus and Student Housing Phase 5 at the Okanagan campus will provide housing for international and domestic students, IPP and ISI students. A new facility to accommodate teaching space, multi-purpose language learning labs, student support and program administration space is proposed at a central location on the Okanagan campus.

Campus	Project	Cost	Provincial Funding	UBC Funding
UBCV	Pathways College/ Global Student Centre (Old SUB Renew) ¹	\$ 59,100	\$ 29,550	\$ 29,550
UBCV	Orchard Student Housing Commons (1,000 beds)	\$110,000		\$ 110,000
UBCO	Mixed Use Classroom Facility	\$ 10,000	\$ 10,000	\$ -
UBCV	Student Housing Phase 5 (250 beds)	\$ 25,000		\$ 25,000
	Total	\$204,100	\$ 39,550	\$ 164,550

1 - Renewal of Old Student Union Building (SUB) eliminates \$20.8M in deferred maintenance

Undergraduate Life Sciences Teaching Labs

Estimate \$72 million

Laboratory experiences enhance teaching and learning by providing the opportunity to explore practical problems and research questions. Through renovation and expansion to the Biological Sciences complex, UBC will provide enhanced learning environments to prepare Canada's, and the world's, next generation of Life Scientists. It will provide updated teaching labs for a wide range of disciplines in the Faculties of Science and Medicine, including microbiology, biology, botany, zoology, biochemistry and cellular & physiological sciences.

This project eliminates \$27.6M in deferred maintenance through the renewal and replacement of aging facilities. The project scope includes the renewal of BioSciences North, the addition of a 4th floor to BioSciences North, and a 4-storey link between BioSciences North and West. BioSciences Centre would be replaced with new 4-storey addition. Combined with the recent BioScience South and West Renewal, the result will be completely renewed and expanded BioScience complex which will support BC's position as the fastest growing biotech centre in Canada and improve UBC's ability to attract and retain the best students and faculty.

Community Health Sciences (CHS)

Estimate \$87.5 million

This innovative knowledge centre in sustainable community health will contribute directly to improved health and wellness in BC, Canada and the world. Its programs emphasize disease prevention and community-based approaches to health by promoting healthy living and healthful environments, research into the prevention and management of chronic illnesses, and reducing inequities and risks for marginalized populations. CHS will play an important provincial role in health policy development, health service delivery planning, education of health service providers and knowledge translation in health care. It will encourage inter-disciplinary learning, research and collaboration between complementary disciplines, Kinesiology and Nursing, groups that are currently housed in dispersed, outmoded and inadequate space.

A new integrated, state-of-the-art 18,550m² building will be located in the UBC Life Sciences precinct adjacent to the Technology Enterprise Facility, Life Sciences Centre and new Pharmaceutical Sciences/Centre of Drug Research & Development building.

UBC FIVE YEAR CAPITAL PLAN – CAPITAL INNOVATION FUND PROJECTS

Campus Lighting Retrofit

Estimate \$9 million

Lighting at UBC consumes approximately 60GWh/yr of energy. Since UBC's last major lighting retrofit in 2000/01, there have been significant advances in lighting efficiency and control options. By undertaking lighting retrofits UBC can make significant savings in lighting efficiency and reduce maintenance costs due to longer lamp life.

Capital cost estimate: \$ 9 million

Operational Cost Savings: \$1.5 million per year in energy and maintenance

Reduces lighting energy consumption by 20GWH/yr (10.5% of campus electricity consumption) Scope: Replace inefficient lighting with lower wattage and LEDs and install adaptive lighting

control in all public areas.

Green Laboratories

Estimate \$10 million

UBC's 1.3 million square feet of laboratory space consumes 50% of campus energy due to high air flows in fume hoods required for safe operations. Most laboratories operate 24 hours a day, 365 days a year. Recent changes to Worksafe BC Fume Hood air flow regulations means that fume hood air flows can be safely reduced by 30%. Reducing air flows during unoccupied periods can significantly and safely reduce energy consumption.

Capital cost estimate: \$ 10 million

Operational Cost Savings: \$1 million per year in energy and maintenance

Reduce air consumption by 30% and GHG emissions by 6,000 tonnes/yr (10%).

Scope: Re-commission and retrofit laboratory heating, ventilating and air conditioning systems.

UBC MAJOR ONGOING/PLANNED SELF-FUNDED PROJECTS

The list below shows major (>\$5 million) on-going academic projects as well as planned academic projects that are proposed to be self-funded by UBC. Student housing and community amenity projects are not shown.

5 Year Capital Plan Instructions

Attachment 5-- Summary of Major Ongoing/Planned Self-Funded Projects



Institution	Campus	Project Description	Anticipated Construction Start Date	Anticipated Occupancy Date	Total Project Budget (\$000s)		
		ACADEMIC CAPITAL PRIORITIES (underway)					
UBC	Vancouver	Djavad Mowafaghian Centre for Brain Health	Aug-11	Aug-13	68,833		
UBC	Vancouver	Earth Sciences Building	Jul-10	Aug-12	75,000		
UBC	Vancouver	Pharmaceutical Sciences + Centre for Drug Research + Development including Modified Barrier Facility + Data Centre	Jun-10	Sep-12	155,230		
		ADDITIONAL ACADEMIC CAPITAL PRIORITIES (planned, self-funded)					
UBC	Vancouver	BC Integrated Research Library (BC IRL)	2012	2014	10,000		