SUBJECT	Capital Projects Update
SUBMITTED TO	Property Committee
MEETING DATE	September 8, 2021
SESSION	Recommended session criteria from Board Meetings Policy:
CLASSIFICATION	OPEN
REQUEST	For information only - No action requested
LEAD EXECUTIVE	Peter Smailes, Vice-President Finance & Operations
SUPPORTED BY	Andrew Szeri, Provost and Vice-President Academic, UBC Vancouver
	Lesley Cormack, Deputy Vice-Chancellor and Principal, UBC Okanagan
	Ananya Mukherjee-Reed, Provost and Vice-President Academic, UBC Okanagan
	Robin Ciceri, Vice-President External Relations
	Pam Ratner, Vice-Provost and Associate Vice-President Faculty Planning
	John Metras, Associate Vice-President Facilities
	Jennifer Burns, Associate Vice-President Information Technology and Chief Information Officer
	Michael White, Associate Vice-President Campus & Community Planning
	Rob Einarson, Associate Vice-President Finance & Operations, UBC Okanagan
	Jennifer Sanguinetti, Managing Director, Infrastructure Development
	Yale Loh, Treasurer
	Aubrey Kelly, President & CEO, UBC Properties Trust

### **EXECUTIVE SUMMARY**

Twice annually, the Board receives a status update on current capital projects and capital priorities in planning. This includes details on major capital building projects (>\$5 million) as well as a summary of routine capital renewal and renovation projects (<=\$5 million). Information on Infrastructure Impact Charge (IIC) projects and Information Technology (IT) projects is also included.

### **Major Building Projects**

There are currently sixteen major building projects in construction or design, with a total approved value of \$1,117 million. Eleven projects are on the Vancouver campus, including the Arts Student Centre, School of Biomedical Engineering Building, and the Gateway Health Building. Four projects are on the Okanagan campus – the Skeena Residence, Nechako Residence & Commons Block, 1540 Innovation Drive, and the Interdisciplinary Collaboration & Innovation Building – and the Geological Field School is near Oliver, BC. A summary and detailed information on the capital project portfolio are provided in Appendices 1 and 2. Building projects completed since January 1, 2010 are included in Appendix 5 for reference.

New student residence projects at both UBCV and UBCO are welcoming students this September. The first two buildings of the UBCV Pacific Residence project are complete (approx. 40% of the total beds), and the Musqueam gifted the Residence and the five Houses new names that appropriately represent the Musqueam language and culture. This project will be referred to by this gifted name - tə šxwhəleləms tə kwakwə?a?t. The pronunciations of this name and the house names have been recorded by Musqueam Elder, Larry Grant, and can be found here. UBCO Skeena Residence and Nechako Residence & Commons Block is also complete.

UBCV Kenny 4<sup>th</sup> Floor Renovation project and the Geological Field School project in Oliver are complete except for final deficiencies, and the Arts Student Centre and Bioenergy Facility Expansion are nearing completion. The Undergraduate Life Sciences Teaching Labs project, completed in fall 2019, has a final projected cost of \$98.2 million, subject to resolution of a contract dispute with the Prime Consultant.

As reported in April 2021, additional costs will be funded through the Operating Budget, Infrastructure Development contingency, IICs (for public realm component), Retained Risk Fund, and an Internal Loan.

The construction market continues to experience COVID-related volatility, cost spikes, and delivery delays generated by supply chain disruptions, freight pricing, and high demand for materials and equipment in recovering economies. Project management teams at both UBC Properties Trust and Project Services (Infrastructure Development) continue to closely monitor the situation, looking for cost savings, adjusting escalation, project contingencies and schedules as required.

The Retained Risk Fund (UBC Policy FM10 Retained Risk Policy) provides internal "self-insurance" for major capital projects to address cost overages resulting from unanticipated construction issues that cannot be managed with standard project contingencies. The Retained Risk Fund had a total balance of \$10.32 million on June 30, 2021. This includes \$9.4 million for the Vancouver campus and \$0.914 million for the Okanagan campus. These balances comply with the target level for the Retained Risk Fund of 1% of the value of active projects (assuming future Retained Risk Fee contributions for projects currently in design). Since the inception of the Retained Risk funds in 2009, a total of \$13.932 million has been paid out for projects on both campuses representing 0.44% of the total value of projects undertaken during that time.



**Major Building Project Status - Approved Project Budgets** 

### **Upcoming Board Approval Requests**

Project Name	Sep 2021	Dec 2021	Jan 2022	Mar 2022
Brock Commons Phase 2 Mixed-Use Student Housing – North Building	Board 3			
School of Biomedical Engineering Building			Board 3	
Gateway Health Building (Nursing, Kinesiology, Integrated Student Health Services & UBC Health)				Board 3
New Recreation Centre				Board 3
Beaty Biodiversity Addition				Board 2
Food & Beverage Innovation Centre	Board 1			
The Gallery (UBC Library)	Board 1+2			
Occupational Therapy/Physical Therapy Surrey Expansion	Purchase & Tl's			
UBC Downtown Kelowna		Lease & Tl's		
UBC Learning Exchange		Purchase & Tl's		

### **Major IT Projects**

Major information technology projects currently in planning or implementation include the Integrated Renewal Program, Application Ecosystem Program, Enterprise Data Integration and Digital Research Infrastructure. A listing of major IT projects is provided in Appendix 3.

### **Routine Capital Projects**

Routine capital includes cyclical maintenance, rehabilitation, upgrade and renovation projects associated with campus buildings and infrastructure. These projects are generally valued at less than \$5 million and are funded from a variety of internal sources – Building Operations, Energy & Water Services, Faculties/Departments, Student Housing & Community Services, Athletics and Recreation, and Parking. The Ministry of Advanced Education and Skills Training (AEST) contributes for capital maintenance of core academic facilities.

In April 2021, AEST confirmed 2021/22 funding of \$35.593 million for UBCV and \$872k for UBCO, with a notional commitment for similar funding in 2022/23 and 2023/24. AEST specifies that these funds be directed toward reduction of deferred maintenance in core academic facilities and that the overall package of projects in each year must be cost-shared between AEST and UBC on a 75%-25% basis. The Carbon Neutral Capital Program (CNCP) is separate from Routine Capital. AEST has increased the 2021/22 CNCP funding to \$3.3255 million, with a notional commitment for similar funding in 2022/23 and 2023/24.

The UBC Facilities team (Infrastructure Development, Building Operations, and Energy & Water Services), in its Routine Capital Steering committee, develops specific projects for the AEST-funded routine capital program based on facility condition assessment and input from department administrators supporting building user priorities. To optimize resources, the team seeks partnership opportunities with Faculties and synergies with other infrastructure renewal and modernization requirements such as learning space upgrades, accessibility and seismic upgrades. A successful partnership with the Faculty of Arts has resulted in the phased renewal of ten floors of Buchanan Tower, with one additional floor in progress and the final floor planned for renewal next fiscal year.

Most AEST-funded projects are less than \$5.0 million and consist of core building system renewals such as roof and envelope repairs, elevator retrofits, electrical infrastructure projects, fire and life safety system retrofits, minor interior refit projects (such as flooring replacements and washroom refurbishments), and utilities infrastructure improvements.

Example projects in this category for 2021/22 include:

- J.B. MacDonald roof replacement \$2.0 million
- Brimacombe atrium glazing renewal \$700k
- Pulp and Paper Centre air handling unit replacement and BMS controls \$1.1 million
- Pharmacy and Life Sciences Centre humidification boiler \$565k
- Frederic Wood Theatre emergency lighting & exit signs \$568k
- Instructional Resources Centre electrical distribution renewal \$600k
- Chemistry Physics elevator renewal \$185k
- Campus fire alarm upgrades \$400k

Some multi-year whole building renewal projects are also undertaken as part of the AEST-funded program to address a full range of deferred maintenance items, seismic upgrade requirements and facility modernization. These projects are larger in scope and are subject to the standard capital projects review process. Routine Capital whole building renewal projects greater than \$5 million being undertaken in 2021/22 are the MacLeod Building renewal and the Museum of Anthropology (MOA) Great Hall Renewal. These projects received Board 1, 2, and 3 approval in September 2020 and are included in the "Major Building Projects" summary. They are funded in the 75% AEST, 25% UBC Routine Capital Program model. UBC has received assurances from AEST that they understand the multi-year commitment that UBC is making with these larger projects and do not intend to reduce their notional funding commitment for the duration of these projects. The MacLeod project construction is progressing well, though supply chain issues for metal studs and the air handling unit have been reported. The MOA project's competitive Construction Management Request for Proposal is complete and a new construction partner has been selected. Imminent re-tendering of trade packages will lead to an updated project budget and schedule.

Significant current routine capital projects outside of the AEST-funded program include:

- 1) Faculty of Dentistry Simulation Lab \$2.8m
  - Renovation in J.B. MacDonald to house technologically advanced patient simulators that will modernize the clinical teaching experience. Funded by Academic Capital Fund, vendor in-kind contribution, and donor funding. Simulation equipment procurement is separate.
- 2) First Nations Longhouse Expansion (Office of the Provost) \$3.6m
  - Infill project to provide space required to support the significant growth in the Indigenous student community. A separate \$675k project is underway to renovate and upgrade space in the First Nations Longhouse for an Indigenous Students Collegium. Both projects are funded by Office of the Provost.
- 3) Music Building Renovations for the Faculty of Arts \$4.3m
  - Renovation of areas on three floors to intensify the use of space and address space needs driven by significant increases in both undergraduate and graduate students in recent years. Funded by the Faculty of Arts.
- 4) Clean Connected and Safe Transportation Testbed Phase 1 \$2.27m
  - A unique national platform to develop the next generation of clean, connected and safe transportation systems. Phase 1 includes provision of a hydrogen refueling station on the west side of Thunderbird Parkade. Funded by CFI/BCKDF, Western Economic Development Canada, and HTEC (industry partner).

# Infrastructure Impact Charge (IIC) Program

The IIC program includes utility, roads and public realm projects required to meet the needs of campus growth. Funding is provided through Infrastructure Impact Charges on neighbourhood and ancillary development projects. A separate information report on the IIC program is provided annually to the Board.

# **Capital Priorities in Planning**

Appendix 4 shows proposed major capital building projects currently in planning that have not yet been brought forward for Board approval. The UBC Executive undertakes an annual prioritization of major capital projects with assistance from the Capital Planning Working Group and input from campus stakeholders. This process generates an updated Five-Year Capital Plan that is submitted each year to the Provincial government. The latest Five-Year Capital Plan (2022/23 – 2026/27) was approved by the Board of Governors in June 2021 and submitted to the Province. The projects in Appendix 4 reflect this Five-Year Capital Plan and other future capital priorities.

Proposed capital projects are evaluated and prioritized using an assessment model that considers how each project contributes to the University's strategic objectives and operational performance & risk mitigation objectives. Consistent with *Shaping UBC's Next* Century the 2018-28 strategic plan, the prioritization criteria that were used in the 2021 round of capital planning are shown below:

# 1) University Strategic Priorities

- President's Academic Excellence Initiative 10%
- People & Places 15%
- Research Excellence 30%
- Transformative Learning 30%
- Local & Global Engagement 15%
- 2) Operational Performance and Risk Mitigation
  - Health & Safety (e.g. seismic risk) 25%
  - Performance & Reliability (e.g. deferred maintenance) 25%
  - Legal / Regulatory / Reputation 25%
  - Business Case 25%

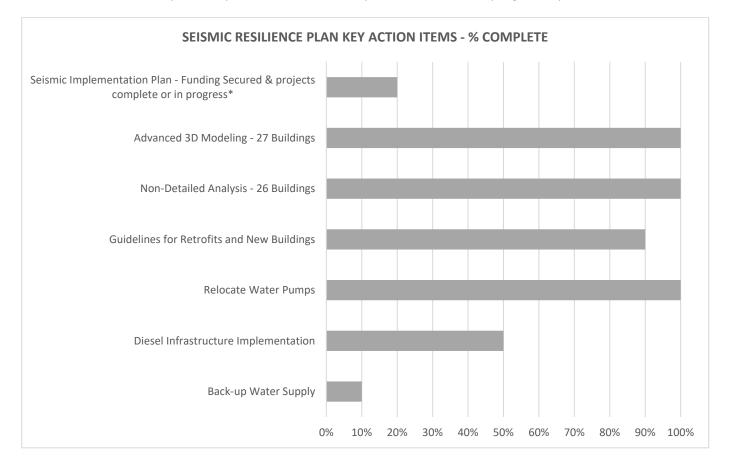
Initial prioritization is "needs-based", therefore funding potential is not a criterion. Alignment with provincial priorities and funding realities are considered separately when decisions are made on projects to be included in the Five-Year Capital Plan or approved for internal funding allocation.

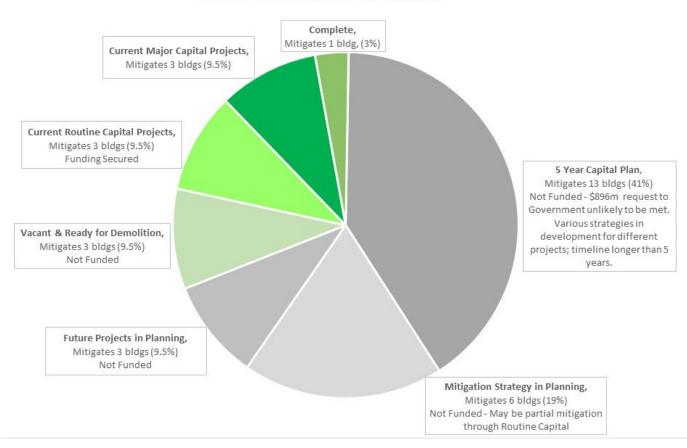
Input on the capital planning process and capital priorities is sought from the following groups:

- UBCV Committee of Deans
- Okanagan Leadership Council (AVPs and Deans)
- Indigenous Partners Musqueam (Okanagan Nation Alliance, planned for 2022)
- Property & Planning Advisory Committee
- UBCV Senate Academic Building Needs Committee
- UBCO Senate Academic Building & Resources Committee
- Vancouver Subcommittee of the Council of Senates Budget Committee
- Alma Mater Society / UBC Student's Union Okanagan
- Graduate Student Society
- Building Operations and Energy & Water Services / UBCO Campus Operations
- UBC Properties Trust (for information)

### **Seismic Resilience Plan**

The Seismic Resilience Plan presented to the Board of Governors in February 2019 identified recommendations and next steps. UBC continues to make progress on operational resilience initiatives related to planning and resource development. The university's response to the pandemic has enabled real time testing of our integrated emergency management program, and development and testing of continuity planning strategies across the organization. The charts below indicate the substantial progress made on the majority of the other key action items from the February 2019 report. A more detailed update on the seismic progress is planned for March 2022.





\*SEISMIC IMPLEMENTATION PLAN PROGRESS

Note that previous work included mitigating 27 other campus buildings since the program started.

### APPENDICES

- 1. Summary by Project Type and Board Approval Level
- 2. Major Capital Building Projects Detailed Information
- 3. Information Technology (IT) Projects Detailed Information
- 4. Capital Plan + Future Priorities
- 5. Capital Projects Completed since January 1, 2010

# Capital Projects Update - Summary by Project Type and Board Approval Level As of 30 June 2021 Dollar figures are all in \$000's

								Confirmed F	unding Sources						Reduction to		Fina	ancing	
Project Type/ Approval Level	GBA (s.f.) <sup>1</sup>	Project Budget (\$000's)	Projected Final	Costs to Date	Prov Gov	Fed Gov	UBCV Central	UBCO Central	Land Dvpt Costs or Taxes	Self-Funded	Faculty or Unit Funded	Fundraising	Unfunded	% Unfunded	Deferred Maintenance <sup>2</sup>	UBC Central Debt	Self-Funded Debt	Faculty / Unit Debt	Total Debt
Infrastructure Projects	•						•		•		•			•		•			
Major Capital Buildings																			
Board 1 - In design	44,130	\$40,000	\$40,000	\$0	\$0	\$0	\$20,000	\$0	\$0	\$0	\$0	\$20,000	\$0	0.00%	\$0	\$20,000	\$0	\$0	\$20,000
Board 2 - In design	669,838	\$500,551	\$500,551	\$7,928	\$0	\$0	\$299,878	\$55,256	\$0	\$0	\$48,717	\$26,700	\$70,000	13.98%	\$21,100	\$300,900	\$14,300	\$26,000	\$341,200
Board 3 - In construction	1,020,711	\$551,554	\$564,540	\$335,446	\$77,670	\$42,731	\$105,434	\$14,389	\$6,330	\$279,848	\$23,471	\$4,704	\$9,179	1.63%	\$59,547	\$80,014	\$278,809	\$0	\$358,823
Complete - Board 4 pending	244,250	\$101,445	\$102,548	\$101,517	\$24,585	\$19,716	\$7,257	\$0	\$0	\$22,812	\$2,249	\$25,929	\$0	0.00%	\$39,547	\$6,209	\$22,812	\$0	\$29,021
Major Capital Building Projects	1,978,929	\$1,193,550	\$1,207,638	\$444,891	\$102,255	\$62,447	\$432,569	\$69,645	\$6,330	\$302,660	\$74,436	\$77,333	\$79,179	6.56%	\$120,194	\$407,123	\$315,921	\$26,000	\$749,044
Routine Capital Projects																			
Building Operations (Provincial funding) <sup>3</sup>		\$24,560	\$24,560	\$2,207	\$18,841	\$0	\$5,719	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$24,560	\$0	\$0	\$0	\$0
Faculties/Departments		\$85,967	\$83,347	\$44,201	\$1,851	\$13,659	\$0	\$0	\$0	\$0	\$70,458	\$0	\$0	\$0	\$85,967	\$0	\$0	\$0	\$0
Student Housing & Community Services		\$18,743	\$18,632	\$4,473	\$0	\$0	\$0	\$0	\$0	\$0	\$18,632	\$0	-\$111	\$0	\$18,743	\$0	\$0	\$0	\$0
Athletics		\$2,584	\$2,584	\$543	\$0	\$0	\$0	\$0	\$0	\$0	\$2,584	\$0	\$0	\$0	\$2,584	\$0	\$0	\$0	\$0
UBC Okanagan		\$33,431	\$32,500	\$22,594	\$1,573	\$0	\$0	\$24,610	\$0	\$0	\$5,220	\$100	-\$1,928	\$0	\$33,431	\$0	\$0	\$0	\$0
Routine Capital Building Projects <sup>4</sup>		\$165,285	\$161,624	\$74,018	\$22,264	\$13,659	\$5,719	\$24,610	\$0	\$0	\$96,895	\$100	-\$2,039	\$0	\$165,285	\$0	\$0	\$0	\$0
Infrastructure Impact Charge (IIC) Projects <sup>5</sup>		\$16,063	\$120,436	\$56,236	\$5,665	\$0	\$0	\$0	\$114,771	\$0	\$0	\$0	\$0	\$0	\$0	\$120,436	\$0	\$0	\$120,436
Subtotal - Infrastructure Projects		\$1,374,898	\$1,489,698	\$575,145	\$130,184	\$76,105	\$438,289	\$94,255	\$121,101	\$302,660	\$171,331	\$77,433	\$77,140	\$0	\$285,479	\$527,559	\$315,921	\$26,000	\$869,480
Information Technology Projects																			
Major IT Projects		\$563,440	\$549,950	\$214,326	\$0	\$0	\$549,950	\$0	\$0	\$0	\$0	\$0	-\$13,490	-2.39%	\$0	\$549,950	\$0	\$0	\$0
Routine IT Projects		\$33,142	\$32,624	\$4,134	\$6,608	\$3,173	\$0	\$16,201	\$1,325	\$0	\$323	\$11,803	\$0	\$0		\$0	\$0	\$0	\$0
Subtotal - IT Projects <sup>6</sup>		\$596,582	\$582,574	\$218,460	\$6,608	\$3,173	\$549,950	\$16,201	\$1,325	\$0	\$323	\$11,803	-\$13,490	-2.32%	#VALUE!	\$549,950	\$0	\$0	\$0
Grand Total	1,978,929	\$1,971,480	\$2,072,272	\$793,605	\$136,792	\$79,278	\$988,239	\$110,456	\$122,426	\$302,660	\$171,654	\$89,236	\$63,650	3.07%	#VALUE!	\$1,077,509	\$315,921	\$26,000	\$869,480

1 - Gross building area is the total floor area including the unrentable area in square feet.

2 - Current total deferred maintenance for Vancouver campus is \$1.28 billion per AVED facility condition database for core academic buildings (not including student housing, athletics facilities and parkades).

3 - Less funding for large renewals, which is included in Major Capital Projects

4 - Cyclical maintenance, rehabilitation, upgrade and renovation projects >\$50,000 and <=\$5 million underway or completed in current fiscal year. Includes projects funded by AEST, Building Operations, Energy & Water Services, Faculties/Departments, Student Housing & Community Services (SHCS), Athletics and Parking.</li>
5 - IIC funded utility, roads and public realm projects underway or completed in current fiscal year. A separate report on the overall IIC Plan is also provided annually to the Board.
6 - IT projects, major (>\$5 million) and routine (>\$50,000 and <=\$5 million), currently in planning/design or completed in the fiscal year.</li>

## Attachment 1

### Maior Capital Building Projects - Detailed Information

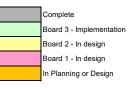
Major Capital Building Projects - Detailed Inform As of 30 June, 2021	mation									Grey = Complete, Board 4 Pending Green = Board 3																Attachment
Dollar figures are all in \$000's										Yellow = Board 2 Pink = Board 1					Dollar figure	es are all in \$000	's									
			Sched	lule		Gross		Capital Cost						Confirmed	d Funding S	Funding							Financing			
Project Name	Project Rep.	Target Compl. at Board 3	Target Completion Final Approved <sup>1</sup>	% Compl.	Actual Completion (Occupancy)	Building Area (SF) Final Approved	Budget Final Approved	Projected Final Cost	Costs to Date	Current Status/ Issues + Variances	Prov Gov	Fed Gov	UBCV Central	UBCO Central	Land Dvpt Cost or Taxes	Self-Funded	Faculty or Unit Funded	Fundraising	Unfunded	% Unfunded	Reduction to Deferred Maintenance	UBC Central Debt	Self-Funded	Faculty/ Unit Debt	Total Debt	Funding/Financing Comments
UBC-Vancouver		-							1										1			μ 1	1			
Djavad Mowafaghian Centre for Brain Health	UBCPT Rob Brown	OCT-13	OCT-13	100%	NOV-13	152,558	\$69,757	\$70,860	\$70,860	Completed and occupied. Basement fit-out underway for Preclinical Discovery Centre (PDC). Additional PDC cost covered by internal sources.	\$24,565	\$19,716	\$1,048					\$25,531	\$0	0.00%					\$0	Included in the Faculty fundraising amount is approx \$3.4M investment income earned from provincial and federal funding received.
Graduate Resarch Commons/Koerner Library Interrelated Projects	UBC Project Services Jay Hiscox		JAN-19	93%		19,041	\$6,707	\$6,707	\$6,229	All phases are complete and occupied.			\$6,209				\$100	\$398	\$0	0.00%	\$39,547	\$6,209			\$6,209	Central funding is expected to finance via future Central operating budget
IIC Public Realm Projects	UBCPT David Poettcker	To be completed in phases over a 15 year period.	To be completed in phases over a 15 year period.		1	N/A	Please refer to IIC Plan	Please refer to IIC Plan	Please refer to IIC Plan	Please refer to IIC Plan					-					Please refer to IIC Plan					\$0	Public Realm projects are funded by Infrastructure Impact Charges.
Geological Field School	UBCPT Craig Shirra		AUG-20	116%		10,824	\$2,673	\$3,200	\$3,092	Project received provisional occupancy June 28th. Completion of the new well is required to remove the provisional condition. The water treatment design is complete and with trades for pricing; target completion by September.							\$368	\$2,724	\$108	3.38%					\$0	
Undergraduate Life Sciences Teaching Labs Renew	UBC Project Services Kyle Reese		JAN-19	111%	SEP-19	176,625	\$88,000	\$98,200	\$97,415	Building occupied and in use. Contractor delay claims settled, but consultant's claim outstanding, \$10.2m projected budget orwage ocvered by Retained Risk Fund, FY20 Mid Yr operating fund, BC Hydro, IIC's (Public Realm), Faculty of Science, ID planning contingency and an internal loan.	\$11,838	\$32,528	\$46,735		\$830		\$249	\$22	\$5,214	5.31%	\$39,547	\$43,635			\$43,635	Unfunded amount possibly to come from capital contingency
Bioenergy Facility Expansion Project	UBC Project Services Ryan Huffman		MAR-21	91%			\$20,361	\$22,820	\$18,457	Commissioning in progress, with boiler start-up expected in August, which will trigger substantial completion. Overage funded by CNCP Provincial funds	\$8,163	\$7,609	\$2,048		\$5,000				\$0	0.00%					\$0	
Arts Student Centre	UBCPT Matt Taylor		SEP-21	78%		11,013	\$10,841	\$10,841	\$8,503	Glazing contractor has gone bankrupt. Replacement vendor resulting in cost increase of roughly 300K, to be funded through Retained Risk Fund.			\$1,526		\$500		\$3,000	\$1,958	\$3,857	35.58%			\$3,857		\$3,857	Unfunded portion is expected to be filled by AMS. A will take out a loan and repaid using future student for collect.
Douglas T. Kenny Building 4th Floor Renovation	UBC Project Services Paul Hays		DEC-19	69%		15,650	\$7,640	\$7,640	\$5,274	Project complete, correction of one deficiency in progress. Final cost approx. \$2.35m under budget.							\$7,640		\$0	0.00%					\$0	Faculty of Arts & Dept of Psychology will fund this project from reserves.
tə šx=həlelərhs tə k=aikk=ə?a?ł (Pacific Residence)	UBCPT Sepehr Rad	Bidg 1: AUG- 21, Bidg 2-5: SEP-21 to JAN- 22	FEB-22	70%		365,876	\$165,034	\$165,034	\$116,181	Construction ongoing. 2 of 5 buildings scheduled for occupany in August 2021 and remaining 3 buildings scheduled for occupancy in Q1 of 2022.						\$165,034			\$0	0.00%			\$160,138		\$160,138	165M loan will be repaid with future rental revenue.
Museum of Anthropology - Great Hall Renewal	UBC Project Services Aletha Utimati		2023	15%		7,922	\$30,556	\$30,356	\$4,585	Funded with Provincial Routine Capital 75% & UBC 25%. Funding received 2020-21 and 21-22; completes with 22- 23 & 23-24 funding. Re-tendering process in progress, with schedule to be updated once new CM contract is awarded	\$21,179	\$2,594	\$6,583						\$0	0.00%		-			\$0	
MacLeod Renewal	UBC Project Services Noel McNally		JUN-23	39%		81,203	\$51,114	\$51,114	\$19,930	Funded with Provincial Routine Capital 75% & UBC 25%. Funding received for 2019-20, 20-21, 21-22; completes with 2022-23 funding. Construction progressing well.	\$36,490		\$12,163				\$2,461		\$0	0.00%	\$14,900				\$0	
Brock Commons Phase 2 Mixed-Use Housing Development - South Building	UBCPT David Poettcker		DEC-23	5%		199,717	\$111,953	\$111,953	\$5,746	South Building Board 3 approval in June/21. Brock Annex Demolition underway. North Buildign submitted for Board 3 approval Sept/21. Cost and area for Brock North excluded from Iotals.			\$36,379			\$68,180	\$7,394		\$0	0.00%	\$5,100	\$36,379	\$68,180		\$104,559	This project is now broken down into 2 separate Projects, South Building and the Future North Buildi (TBD). Self funding portion of the loan is expected to come from Student Housing & Community Services and Faculty of Arts.
Gateway (Nursing, Kinesiology, ISHS & UBC Health) Building	UBCPT Dave Poettcker		JUL-24	2%		267,000	\$189,911	\$189,911	\$4,450	Design in progress. Project ambitions (both sustainability and cultural)are significant. Proposed hybrid wood structural system will be first of its kind in Canada.			\$165,194				\$23,717	\$1,000	\$0	0.00%	\$21,100	\$131,140	\$1,000	\$1,000	\$133,140	Central Debt will be funded from Academic Capital Fund. Self Funded Loan will be cover from future Kinesiology Student Fee; 1M Ioan will carry by Facu of Education
Recreation Centre (UBCV)	UBCPT Dave Poettcker		AUG-22	1%		100,933	\$65,839	\$65,839	\$830	Design in progress. Construction budget currently \$1.2 M over, value engineering in progress.			\$43,139					\$17,700	\$5,000	7.59%		\$43,319	\$13,300		\$56,619	Expected 43.1M internal loan will be funded from U Central. 13.3M internal loan will be fund from futur student fee received. Unfunded amount is expecter come from fundraising and backstop by VP Student
School of Biomedical Engineering (SBME) Building	UBCPT Sepehr Rad		DEC-24	1%		155,905	\$135,953	\$135,953	\$1,774	Design in progress, with 50% Condstruction Documents to be completed July 23, 2021. Targeting Board 3 submission January 2022.			\$77,953				\$25,000	\$8,000	\$25,000	18.39%		\$77,593		\$25,000	\$102,593	Unfunded portion is expected to come from Min. of Advanced Education, however, funding has not yet been confirmed
Beaty Biodiversity Centre Addition	UBCPT Rob Brown		NOV-24	0%		44,130	\$40,000	\$40,000	\$0	Architect selected. Selection of balance of team in progress.			\$20,000					\$20,000	\$0	0.00%		\$20,000			\$20,000	The University is matching the 20M donation through ACF. This will be Finance through a 30Year internal loan
SUBTOTAL (UBC-V)						1,608,397	\$ 996,339	\$ 1,010,427	\$ 363,32		\$102,235	\$62,447	\$418,977	\$0	\$6,330	\$233,214	\$69,928	\$77,333	\$39,179	3.88%	\$120,194	\$358,275	\$246,475	\$26,000	\$630,750	
UBC-Okanagan																				1			<b>1</b>			
Nechako Residence	UBCPT Craig Shirra		JAN-21	95%		128,654	\$50,950	50,950	\$48,328	Provisional Occupancy for the base building issued July 2nd. Dining hall, servery and convenience store were a separate building permit, Occupancy targeted by end of July 2021.				\$1,957		\$46,634	\$2,359		\$0	0.00%			\$46,634		\$46,634	Loan will be paid from future student housing rental and meal plan revenue.
Skeena Residence	UBCPT Craig Shirra		AUG-20	98%		72,651	\$24,981	24,981	\$24,428	Occupancy achieved in Aug 2020. The final piece of mechanical cooling equipment was installed in July 2021.	\$20					\$22,812	\$2,149		\$0	0.00%			\$22,812		\$22,812	Capital cost to be internally financed with debt servic paid from systemwide student housing rental and m plan revenue.
1540 Innovation Drive, Kelowna			JUN-23	64%		23,227	\$12,432	12,432	\$7,935	Occupancy scheduled for July 30th. Some non-life safety scope such as landscape and Wfl will not be complete. Some comissioning will be needed once equipment is relocated from RE-Aug 10-12th. Aug 17th is the proposed fully complete / no trades in the building date.				\$12,432					\$0	0.00%					\$0	
Interdisciplinary Collaboration & Innovation (ICI) Building	UBCPT Craig Shirra		DEC-24	1%		146,000	\$108,848	108,848	\$874	Design in progress, targeting June 2022 for Board 3 approval, followed by construction. A \$3.2m cluster plant to be funded from UBCO reserves was recently added to the project scope.			\$13,592	\$55,256					\$40,000	36.75%		\$48,848			\$48,848	48.8M Ioan finance over 30 years term will be co- funded by both UBCV and UBCO operating fund. 33 expected from Federal & Provincial investment (not confirm) and 10M donation (not yet confirm)
SUBTOTAL (UBC-O)						370,532	197,211	197,211	81,565		\$20	\$0	\$13,592	\$69,645	\$0	\$69,446	\$4,508	\$0	\$40,000	20.28%	\$0	\$48,848	\$69,446	\$0	\$118,294	
GRAND TOTAL						1,978,929	\$1,193,550	\$1,207,638	\$444,891		\$102,255	\$62,447	\$432,569	\$69,645	\$6,330	\$302,660	\$74,436	\$77,333	\$79,179	6.56%	\$120,194	\$407,123	\$315,921	\$26,000	\$749,044	

1 - Final Approved figures differ from Board 3 figures in those cases where the Board of Governors has approved a post-Board 3 scope, schedule and/or budget change. Note also that this column is used to total all project budgets so includes the latest figures for projects at the Board 1 and Board 2 approval stage.

### Attachment 2

### Information Technology (IT) Projects - Detailed Information

Projects underway or completed in the past 12 months - as of 30 June 2021 Dollar figures are all in \$000's



																		ding							F	inancing		
				Project		Actual	Project I	Budget	Projected Final							C	onfirmed Fu	Inding Sour	rces		-							
Proje	:t #	Project Name	Faculty / Dep.	Rep.	% Compl.	Compl. (Occu.)	Fin		Cost	Costs to D	ate Current Status	Issues/Comments	Prov Gov	/ Fed G	iov UE	CV Central		Land Dvpt Cost or Taxes		Department Funded	Fundraisin g	Unfunded	% Unfunded	UBC Central Debt	Self- Funded	Faculty/ Unit Debt	Total Debt G G	ling/Financin Comments
		IT - Major Capital (>\$2.5m)																										
		IRP Student					\$	311,240	\$ 311,24	)\$2	6,314 Board 3 - Implementation				\$	311,240								\$ 311,240			Inte	ternal Loan
		IRP Release 1 Completion					\$	29,500	\$ 29,50	\$	- n/a				\$	29,500								\$ 29,500				
		IRP/AEP HR-FIN Release 1					\$	222,700	\$ 209,21	)\$18	8,012 Board 3 - Implementation				\$	209,210								\$ 209,210			e: inclu	FY20/21 estimates udes EPBC, aS. UDaP.
		Total - Major IT					\$	563,440	\$ 549,95	\$ 21	4,326		\$ -	\$	- \$	549,950	\$-	\$-	\$-	\$-	\$-	\$-	0%	\$ 549,950	\$-	\$-	\$-	

### Attachment 3

### UBC Five-Year Capital Plan + Future Capital Priorities

Current 2021/22 priorities identified through Five-Year Capital Plan development process including campus-wide stakeholder consultation. The capital priorities list is regularly updated to reflect latest approvals and any budget, funding and schedule changes.

Attachment 4	ŀ
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	Project Name	Faculty / Dept	Completion	Gross Building Area	Capital Cost (\$000s)	Current Status
ank	ACADEMIC PROJECTS (Five-Year Capital Plan projects in red)	Faculty / Dept	Target Completion	Gross Area (sf)	Capital Cost (\$000s)	Current Status
1	School of Biomedical Engineering	Applied Science/Medicine	2024	151,305	\$135,953	Board 2
2	Gateway Building (Nursing, Kinesiology, UBC Health, Integrated Student Health Services)	Nursing/Kinesiology/UBC Health/VPS	2024	266,946	\$189,910	Board 2
3	Chemistry Lab Complex	Science	2025, 2027	274,870	\$265,800	Exec 2
4	Interdisciplinary Collaboration & Innovation Building - UBCO	UBCO Multi-Faculty	2025	165,000	\$108,848	Board 2
5	Mathematics Building	Science	2026	126,000	\$118,000	Exec 1
6	Medicine One	Medicine	2026	TBD	\$527,000	Exec 1
7	Applied One	Applied Science	2027	328,300	\$264,700	Exec 1
8	Arts at Armoury Commons	Arts	2027	110,000	\$80,000	Exec 1+2
9	J B MacDonald Dentistry Expansion	Dentistry	2028	95,000	\$81,000	Exec 2
10	UBC Downtown Kelowna Project	UBCO Multi-Faculty	2024	80,600	\$76,000	In planning
11	Physical Therapy & Occupational Therapy - Surrey Expansion	Medicine	2022	25,930	\$33,300	In planning
	Asian Centre	Arts/Library	TBD	55,000	\$27,700	Exec 1
	Belkin Expansion	Arts	TBD	8,500	\$10,500	Exec 1
	Beaty Biodiversity Addition	Science	2024	44,130	\$40,000	Board 1
	Brock Commons Phase 2 Academic Component	Arts/VP Acad./VP Students	2024		\$39,900	Board 3
	Computer Science Expansion	Science	TBD	213,800	\$154,000	In planning
	Digital Learning Factory - UBCO	UBCO/Applied Science	2024	140,000	\$78,000	Exec 1
	Food and Beverage Innovation Centre	Land & Food Systems	TBD	10,000	\$10,000	Exec 3
	Forestry Expansion	Forestry	TBD	50,000	\$37,500	Exec 2
	Future Academic Building - UBCO	UBCO Multi-Faculty	2028	130,000	\$104,000	In planning
	Geography Building	Arta	TBD	90,000	\$70,000	In planning
	Innovation Hub	VP Research	TBD	73,873	\$45,000	Exec 2
	Learning Exchange	VP External	TBD	11,000	\$13,000	Exec 2
	Music Replacement + Expansion	Arts	TBD	157,000	\$176,600	Exec 1
	Sauder Graduate School Expansion	Sauder	TBD	142,000	\$105,000	Exec 2
	School of Public Policy & Global Affairs	Arts	TBD	48,200	\$38,900	In planning
	Technology Enterprise Facility 4 (TEF 4) - UBC Properties Trust	Central, Faculties	2022	103,550	\$23,700	On Hold
	The Hive @ UBC Farm	Land + Food Systems	2023	62,054	\$33,000	Exec 3
	Vancouver Off-Campus Presence	VP External	TBD	35,000	\$7,000	Exec 2
	Total Academic Pro			2,998,058	\$2,894,311	

Board-approved Five-Year Capital Plan projects shown in red. Plan submitted to AEST in June 2021.

### Target completion dates are dependent on project funding.

STUDENT EXPERIENCE PROJECTS	Faculty /Dept	Target Completion	Gross Building Area (sf)	Preliminary Capital Cost (\$000s)	Current Status
Armoury Commons (1,000 beds)	SHCS/Arts	TBD	TBD	\$120,000	In planning
Totem Park East / Totem Field (700 beds)	SHCS	TBD	TBD	\$119,000	In planning
Place Vanier Infill (700 beds, 2024/25)	SHCS	TBD	TBD	\$30,000	In planning
St. John's College Graduate Residence Expansion (100-150 beds)	St. John's College/SHCS	TBD	TBD	\$25,000	In planning
New Recreation Centre	Athletics & Recreation	TBD	100,933	\$65,839	Board 1
War Memorial Gym Renewal	Athletics & Recreation	TBD	96,284	\$62,600	In planning
Thunderbird Stadium Redevelopment	Athletics & Recreation	TBD	57,500	\$50,000	Exec 1
Integrated Performance Centre (Strength & Conditioning)	Athletics & Recreation	TBD	12,000	\$9,000	In planning
UBCO Gymnasium Expansion	UBCO Athletics	TBD	TBD	\$30,000	In planning
UBCO New Field House	UBCO Athletics	TBD	2,300	\$16,000	Exec 1
UBCO Studetn Union	UBCO Students' Union	TBD	TBD	TBD	Exec 1
Total Student Experience Projects			269,017	\$527,439	

CAMPUS OPERATIONS, SUSTAINABILITY AND RESILIENCE PROJECTS	Faculty /Dept	Target Completion	Gross Building Area (sf)	Preliminary Capital Cost (\$000s)	Current Status
Campus Energy Centre - Campus Energy Resilience Expansion	Energy & Water Services	TBD	TBD	\$56,000	In planning
Diesel Fuel Storage Facility (Seismic Resilience Project)	Building Operations	TBD	TBD	\$5,000	In planning
Seismic Upgrades/Mitigations not addressed by other capital projects	Various	TBD	TBD	\$686,000	In planning
Total Campus Operations, Sustainability and Resilience Projects				\$747,000	
For Reference: Seismic Mitigation Planning, 2019 priority building list					
Anthropology & Sociology Building	Arts	2027	35,327	\$31,000	In planning
Bookstore	VP Students	TBD	TBD	TBD	In planning
Chemistry Block A - Chemistry/Physics - Mitigated by future Chemistry Complex project	Science	2029	84,012	\$0	Exec 2
Chemistry Block B - Chemistry East - Mitigated by future Chemistry Complex project	Science	2027	57,834	\$0	Exec 2
Civil & Mechanical Engineering (CEME) Building	Applied Science	2031	103,538	\$138,000	In planning
Douglas Kenny Building (Psychology)	Arts	2034	103,473	\$155,000	In planning
Frank Forward Building - Mitigated by future Applied-1 project	Applied Science	2027	85,433	\$0	Exec 1
H.R. MacMillan Building	Land + Food Systems, Applied Science	2034	149,037	\$204,000	In planning
Jack Bell Building (Social Work)	Arts	2025	30,871	\$20,000	In planning
J.B. MacDonald Building - Mitigated by future JBM Dentistry Expansion project	Dentistry	2029	79,018	\$0	Exec 2
Leonard S. Klinck Building - Mitigated by future Mathematics project	IT/Science	2036	115,421	\$0	Exec 1
Lower Mall Research Station (LMRS)	Science/ApSci/Kin	2033	71,354	\$87,000	In planning
MacLeod Building - Renewal in progress, Routine Capital program	Applied Science	2023	79,061	\$0	Construction (routine capital program), B3
Medical Block C - Mitigated by future Med-1 project	Science/ Medicine	2029	43,239	\$0	Exec 1
Museum of Anthropology - Renewal in progress, Routine Capital program	Arts	2023	123,645	\$0	Cons'n re-tender (routine capital program), B3
Music Building - Mitigated by music replacement project	Arts	2028	74,475	\$0	In planning
Robert Osborne Centre - Unit 1 - Mitigated by Gateway project, in design	Kinesiology	2024	54,874	\$0	Board 2
Robert Osborne Centre - Unit 2 - Mitigated by Gateway project, in deisgn	Kinesiology	2024	49,396	\$0	Board 2
Woodward Library	Library	2025	83,711	\$51,000	In planning
Subtotal Seismic Mitigation Planning				\$686,000	

Total Future Capital Priorities		\$4,168,750	
			Funding %

CAPITAL PLAN TOTAL All projects completed since January 1, 2010 + projects currently in design or construction + Five-Year		1,454,791	\$4,199,019	
				Funding %

# UBC Capital Projects Completed since January 1, 2010

Dollar figures are all in \$000's

			Gross		
Project Name	Faculty / Dept	Completion	Building Area	Capital Cost	Current Status
Projects completed since January 2010 (for historical context):					
UBC Renew Phase 1 - Old Auditorium	Arts	APR-10	32,734	\$20,141	Complete
UBC Renew Phase 1 - Buchanan A	Arts	JUN-10	30,753	\$12,147	Complete
T-bird Stadium Turf Field and Grass Rugby Fields	Athletics	AUG-10	N/A	\$2,661	Complete
UBCO Student Housing Phase 3B	SHHS	AUG-10	42,618	\$8,120	Complete
UBCO Arts & Science Building 2	Arts & Science	SEP-10	86,225	\$41,543	Complete
School of Population & Public Health	Medicine	SEPT-10	30,000	\$7,819	Complete
UBC Renew Phase 2A BioSciences West & South	Science	MAR-11	151,669	\$61,900	Complete
UBCO Reichwald Health Sciences Centre	Medicine	APR-11	48,158	\$30,650	Complete
Tennis Facility	Athletics	JUN-11	71,000	\$9,345	Complete
UBCO Engineering Management Building	Applied Science	AUG-11	180,532	\$69,611	Complete
Norman B. Keevil Institute of Mining Engineering	Applied Science	AUG-11	10,312	\$4,027	Complete
Totem In-Fill Student Housing Project	SHHS	AUG-11	181,706	\$38,255	Complete
Wayne & William White Engineering Design Centre	Applied Science	AUG-11	20,148	\$8,326	Complete
Centre for Integrated Research in Sustainability (CIRS)	VP Research	AUG-11	58,373	\$36,781	Complete
Childcare Expansion - Phase 1	SHHS	SEP-10/SEP-11	17,388	\$3,543	Complete
Faculty of Law - Allard Hall	Law	SEP-11	141,345	\$55,901	Complete
UBCO Student Housing Phase 4	SHHS	SEP-11	68,213	\$14,058	Complete
UBCO Geoexchange Phase 3	UBCO	OCT-11	N/A	\$6,494	Complete
Centre for Comparative Medicine	VP Research	NOV-11	75,933	\$37,030	Complete
Sauder School of Business Building Project	Sauder	JAN-12	265,820	\$69,934	Complete
UBCO Fitness / Wellness Centre	UBCO Athletics	JAN-13	8,500	\$4,060	Complete
Bioenergy Research & Demonstration Project	Energy & Water Services	JUL-12	19,773	\$27,400	Complete
Earth Science Building (ESB)	Science	AUG-12	164,020	\$74,700	Complete
Pharmaceutical Sciences/CDRD + Modified Barrier Facility & University Data Centre	PharmSci	SEP-12	246,182	\$150,903	Complete
Gerald McGavin UBC Rugby Centre	Athletics	JAN-13	5,150	\$2,500	Complete
Leon & Thea Koerner University Centre	Peter Wall/SHHS	SEP-13	38,000	\$5,598	Complete
Ponderosa Commons (Phase 1)	SHHS	SEP-NOV-13	298,731	\$87,655	Complete
Djavad Mowafaghian Centre for Brain Health	Medicine/	NOV-13	152,558	\$69,757	Complete
Bookstore Renovation & Expansion	Vancouver Coastal Health Bookstore	AUG-14	8,800	\$6,608	Complete
Robert H. Lee Alumni Centre	Alumni Assoc	APR-15	41,700	\$19,478	Complete
New Student Union Building	AMS	MAY-15	253,750	\$108,760	Complete
Library PARC	Library	SEP-15	24,540	\$11,140	Complete
Engineering Student Centre	EUS	SEP-15	10,058	\$5,740	Complete
Dairy Education & Research Centre - Researcher Housing (Agassiz)	Land + Food Systems	SEP-15	11,600	\$3,500	Complete
Bentley Family Dining Hall at Loon Lake	Forestry	SEP-15	6,315	\$3,000	Complete
Baseball Training Facility	Athletics	SEP-15	20,000	\$3,861	Complete
	Arts	DEC-15			•
Iona Building Acquisition - Vancouver School of Economics Ponderosa Commons (Phase 2)	SHHS	JUN-16	99,663 288,903	\$33,995 \$77,829	Complete
UBC Vancouver District Energy System	Energy + Water Services	JUN-16	200,903 N/A	\$77,629	Complete
Orchard Commons, Mixed-Use Student Housing	SHHS/Vantage College	SEP-16	448,686	\$88,300	Complete
Aquatic Centre	Athletics	DEC-16	74,448	\$131,274 \$39,900	Complete
Aquatic Centre Henry Angus Tower Seismic Upgrade	Sauder	JAN-17	0	\$39,900 \$4,162	Complete
Quantum Matter Institute	Sauder Science/Applied Science	APR-17	51,667	\$4,162	Complete
National Soccer Development Centre	Athletics	JUN-17	30,000	\$30,269	Complete
MOA Northwest Coast Masterworks Gallery	Athletics	JUN-17 JUN-17	2,700		Complete
Indian Residential Schools History & Dialogue Centre	Arts First Nations House of Learning	JUN-17 JUN-17	6,523	\$4,100 \$5,800	
Brock Commons Phase 1 - Tall Wood Student Residence		JUN-17 JUL-17		· · · · · · · · · · · · · · · · · · ·	Complete Complete
Totem Park Residence In-Fill Phase 2	SHHS SHHS	JUL-17	162,750 99,951	\$51,525	Complete
Sports Medicine	Medicine	JUL-17 JUL-17	21,173	\$30,200	Complete
Sports Medicine UBCO Teaching & Learning Centre (The Commons)				· · ·	· · · · · · · · · · · · · · · · · · ·
OBCO reaching a Learning Centre (The Continons)	UBCO Library	DEC-18 AUG-19	62,407 N/A	\$35,000	Complete
	CPCD	AUG-19	IN/A	\$21,750	Complete
UBC Exchange (New Bus Transit Terminal)	C&CP				Complete
UBC Exchange (New Bus Transit Terminal) Exchange Residence (at Gage South)	SHHS	AUG-19	290,000	\$76,973	Complete
UBC Exchange (New Bus Transit Terminal)					Complete Complete Complete