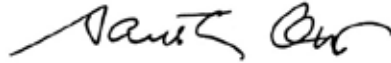


SUBJECT	CAPITAL PROJECTS UPDATE
MEETING DATE	NOVEMBER 26, 2019

Forwarded on the Recommendation of the President

**APPROVED FOR
SUBMISSION**



Santa J. Ono, President and Vice-Chancellor

FOR INFORMATION

Report Date	November 5, 2019
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Presented By Peter Smailles, Vice-President Finance & Operations
 Andrew Szeri, Provost and Vice-President Academic, UBC Vancouver
 Deborah Buszard, 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 Enrolment & Academic Facilities
 John Metras, Associate Vice-President Facilities
 Jennifer Sanguinetti, Managing Director, Infrastructure Development
 Jennifer Burns, Associate Vice-President Information Technology & Chief Information Officer
 Michael White, Associate Vice-President Campus & Community Planning
 Aubrey Kelly, President & CEO, UBC Properties Trust

EXECUTIVE SUMMARY

At each meeting, 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

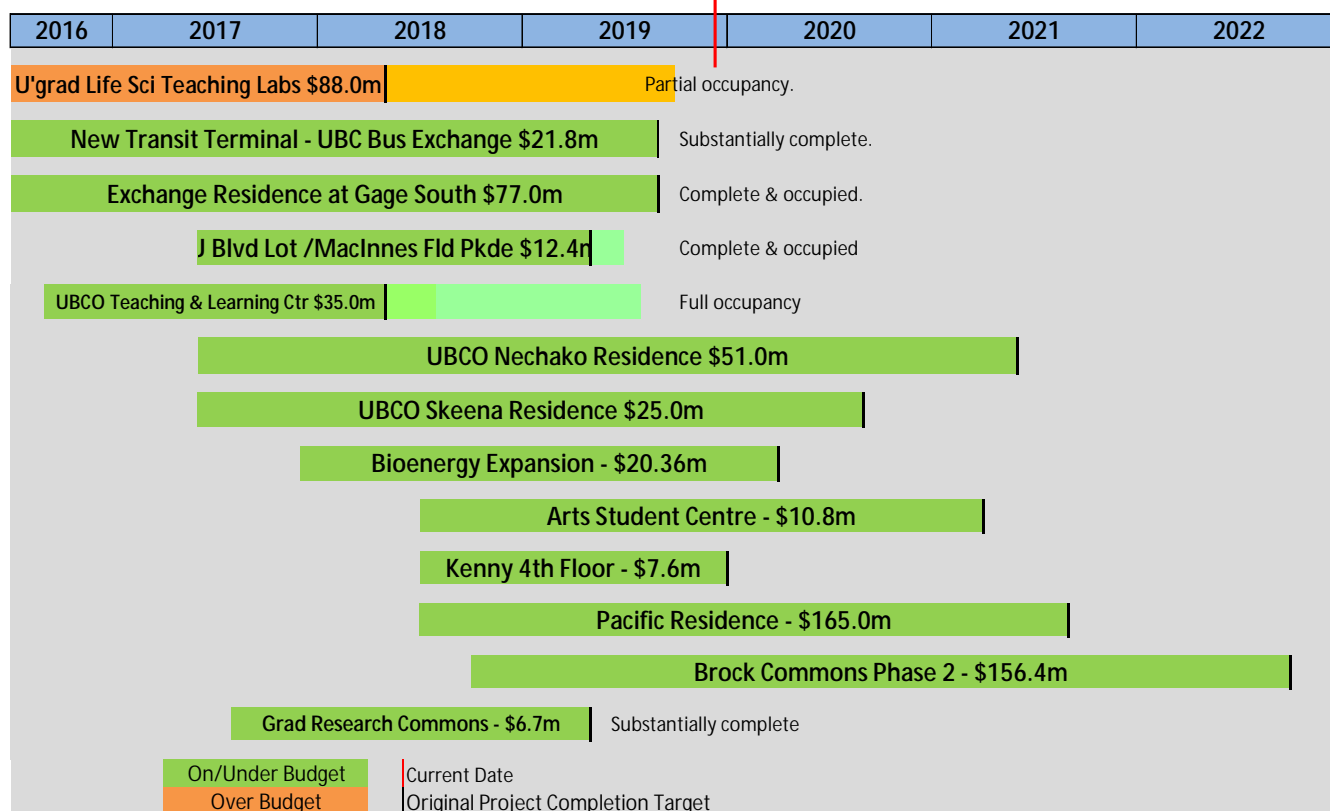
There are currently twelve major building projects in construction or design, with a total value of \$644.4 million. Ten projects are on the Vancouver campus, including the newly completed UBC Exchange Bus Terminal and Exchange Student Residence. Two projects are on the Okanagan campus, the Nechako Residence & Commons Block and the Skeena Residence. A summary and detailed information on the capital project portfolio are provided in Attachments 1 and 2. Building projects completed since January 1, 2010 are included in Attachment 5 for reference.

The highly active construction markets in Vancouver and Kelowna are currently resulting in reduced trade contractor availability, low bid coverage on tenders and escalating costs. These challenges have impacted recent and current UBC projects and are resulting in the need for budget adjustments and in some case the use of the Retained Risk Fund to address unanticipated cost overages.

- Undergraduate Life Sciences Teaching Labs – Due to construction market conditions, site-specific issues and operational decisions the project budget was increased from \$80 million to \$88 million. This was approved by the Board in February 2018. A subsequent contractor delay claim will add another ~\$3 million to the cost. This will be funded through Central contingency and the Retained Risk Fund.

- Graduate Research Commons/Koerner Interrelated Projects – In late 2018, the budget, originally set in 2014, was increased from \$4.30m to \$6.71m due to market escalation and scope changes. The project, with updated budget, was given Board 1, 2 + 3 consent via an out-of-cycle approval on October 31, 2018.
- UBCO Nechako & Skeena Residences – Significant construction cost escalation in Kelowna contributed to increased budgets for these projects, both of which were granted Board 3 approval in February 2019. The budget for Skeena has increased by \$2.17m (9.5%) from Board 2 due to requirements for PassiveHouse certification, added mechanical system redundancy and construction cost escalation. Note that the PassiveHouse premium will be partially offset by life-cycle and operating savings. Nechako increased by \$2.76m (5.7%) due to complex mixed-use design requirements as well as cost escalation.
- Arts Student Centre – This project received Board 1 approval June 2018, however, following a higher than anticipated cost estimate for the initial schematic design on the original Bosque site, the Arts Student Centre was granted revised Board 1 approval in September 2019 for a new project location to reflect a change in site selection. The project has been relocated to the Brock Commons Phase 2 site after concerns were raised about the removal of eight trees in the Bosque. Also approved were increases to the preliminary capital budget to \$10.77 million, the operating budget, as well as a revised schedule. The Faculty of Arts and the Arts Undergraduate Society agreed to each contribute an additional \$500,000 to increase the project budget by \$1.0 million and the Executive agreed that all costs associated with the site change will be covered by UBC Central contingency.
- Pacific Residence – Due to general market escalation, the estimated cost increased by \$4.9 million from the \$160.1 million estimate at Board 2. Also, since Board 2, the overall bed count increased from 934 to 940 beds so on a cost per bed basis, the capital cost increase is largely offset by the bed addition. The number of parking stalls decreased from 220 to 185.
- Brock Commons Phase 2 Mixed-Use Housing Development – The estimated capital cost is now \$156.4m, a reduction of \$6.8m from the preliminary estimate of \$163.2m at Board 1 in September 2018. This reduction is due to a net decrease in program area.
- Geological Field School – On hold for several years, the project received a donor funding commitment in October 2018. The project is remobilizing with detailed design underway and Development Permit in place. The Building Permit submission is awaiting approval once flood risk is waived. Anticipated start on site is November 2019.
- Retained Risk Fund – The Retained Risk Fund (UBC Policy #125) 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 \$7.7 million on September 30, 2019. This includes \$6.6m for the Vancouver campus and \$1.1m for the Okanagan campus. These balances are in compliance with the target level for the Retained Risk Fund of 1% of the value of active projects. Since the inception of the Retained Risk funds in 2009, a total of \$7.89 million has been paid out for projects on both campuses. This represents 0.6% of the total value of projects undertaken during that time.

Major Building Project Status



Upcoming Board Approval Requests

Project Name	Dec 2019	Feb 2020	Apr 2020	Jun 2020
Arts Student Centre	Board 2			Board 3
School of Biomedical Engineering			Board 1	
Brock Commons Phase 2 Mixed-Use Student Housing			Board 3	
Gateway Building (Nursing, Kin, UBC Health & ISHS)	Board 1			

Major IT Projects

Major information technology projects currently in planning or implementation include the Integrated Renewal Program (IRP - Student, HR, Finance), Recruitment - Customer Relationship Management (CRM) System (in early sustainment mode), IRP Application Ecosystem Program, and Learning Technology Ecosystem Renewal. A listing of major IT projects is provided in Attachment 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 less than \$5m and are funded from a variety of internal sources - Building Operations, Energy & Water Services, Faculties/Departments, Student Housing & Hospitality Services, Athletics, and Parking – as well as with a contribution from the Ministry of Advanced Education, Skills & Training (AEST) for capital maintenance of core academic facilities.

AEST has increased Routine Capital funding to UBC to address much needed capital maintenance in campus buildings. The amounts are as follows:

- 2018/19: \$39.5 (received)
- 2019/20: \$39.85 (received)
- 2020/21: \$39.85m (planned)
- 2021/22: \$39.85m (planned)

AEST has specified 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. A small portion of the funding (\$1.66m) is allocated toward Carbon Neutral Capital Program projects.

The UBC Facilities team (Infrastructure Development, Building Operations, and Energy & Water Services) develop the specific projects for the AEST-funded routine capital program based on facility condition assessment and input from department administrators regarding building user priorities. Synergies are sought with other infrastructure renewal and modernization requirements such as learning space upgrades, accessibility upgrades and seismic upgrades. Most 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 2019/20 include:

- Koerner Library replacement of failed glazing units - \$1.46m
- Michael Smith Labs chiller - \$865k
- School of Population and Public Health, Biomedical Research Centre fire alarm renewal - \$300k
- Biomedical Research Centre elevator renewal - \$167k
- Chan Roof Replacement Phase 1 - \$835k

Some 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 fall above the \$5m Board-approval threshold. Given the necessity to plan and execute these projects in very tight timelines, it was previously agreed that they would be approved by the Board as part of the annual Operating Budget approval process. This agreement is documented in Policy 126 (Capital Projects, Capital Purchases & Internal Loans), section 5.6. Examples of these projects include:

- Old SUB renewal and swing space (UBC Life Building) - \$33m (2016/17, 2017/18). This project is complete.
- Hebb Tower renewal - \$34.40m (2017/18, 2018/19, 2019/20). This project is in construction and will be completed in late 2019. Hebb teaching spaces moved to Old SUB for the duration of construction. Occupants will return to Hebb in December.
- Museum of Anthropology roofing, envelope and seismic upgrade - \$35m (2018/19, 2019/20, 2020/21). Design nearing completion. Roofing to complete by November 2019. Seismic project to commence January 2020.
- MacLeod Building renewal and seismic upgrade - \$48m (2019/20, 2020/21, 2021/22). Design underway.

An overview of the routine capital program is provided in the 2019/20 Operating Budget.

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

- 1) Museum of Anthropology (MOA) Education Centre - \$4.56 million
 - Provides new theatre gallery for public education programming. Funded by Canadian Heritage, donor funding, MOA reserves and operating budget, and Faculty of Arts operating budget. The scope and budget of this project is currently being reviewed. There has been a partial donor commitment but it is not enough for the full project envisioned so a review of options is underway. Project remains on hold until full funding is available.
- 2) 3T MRI Imaging Lab (Centre for Brain Health) - \$3.24m
 - Provides the facility for a new 3T whole body MRI for research use. Funded through Canada Foundation for Innovation (CFI)/BC Knowledge Development Fund (BCKDF), Faculty of Medicine, Vancouver Coastal Health Research Institute and Central operating budget. Imaging equipment procurement is separate.
- 3) PET MRI Imaging Lab (Centre for Brain Health) - \$4.61m
 - Provides facility for new PET MRI for research use. Funded through CFI/BCKDF. Imaging equipment procurement is separate.
- 4) Wellington MRI Lab Addition at Centre for Comparative Medicine - \$3.21m
 - Magnetic resonance imaging (MRI) suite for innovative research on traumatic brain injury. Funded through CFI/BCKDF, vendor in-kind contribution, department funding and donor funding. Imaging equipment procurement is separate.
- 5) Integrated Health Services Short Term Solutions - \$3.69m
 - Provides space to meet the demand for student health services between 2019 and 2023, after which the services will be housed in the Gateway (Nursing, Kinesiology, Integrated Student Health Services & UBC Health) Building. The scope includes the provision of a modular building adjacent to Brock Hall and the renovation of space in the lower level of Orchard Commons.
- 6) Geological Field School (Faculty of Science) - \$2.75m
 - Donor-funded project near Oliver, BC. Scope includes updating and expanding this historic facility including residences, dining facilities and a lecture hall.

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

Attachment 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 (2020/21 – 2024/25) was approved by the Board of Governors in June 2019 and submitted to the Province. The projects in Attachment 4 reflect the latest 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 2019 round of capital planning are shown below. These criteria and weightings were changed slightly as part of the 2019 capital planning process based on stakeholder input. These changes were presented as part of the Five-Year Capital Plan approval submission at the June 2019 Board meeting:

1) University Strategic Priorities

- People & Places – 15%
- Research Excellence – 35%
- Transformative Learning – 35%
- 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. Political 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:

- Committee of Deans
- Property & Planning Advisory Committee
- Senate Academic Building Needs Committee, UBC Okanagan Space Management Committee
- Vancouver Subcommittee of the Council of Senates Budget Committee
- UBC Okanagan Senate Building and Resource Committee
- Information Technology Advisory Committee
- Alma Mater Society, UBC Students' Union Okanagan
- Graduate Student Society
- Alumni Association
- Building Operations and Energy & Water Services, UBC Okanagan Campus Operations
- UBC Properties Trust (for information)

Seismic Mitigation Plan

The seismic resilience plan for the Vancouver campus has been updated. A seismic hazard assessment and screening-level building vulnerability assessments were completed by our consultant (Arup). The hazard assessment quantifies the seismic hazard facing the campus and reflects current knowledge of earthquake types, intensities, return periods and probabilities. These assessments led to a recommended list of priority buildings for which detailed structural engineering analysis using advanced 3D modelling coupled with physical testing was completed to determine specific structural vulnerabilities, retrofit strategies and costs. Arup additionally provided a set of operational recommendations to improve campus resilience in the event of an earthquake. The draft seismic resilience plan, incorporating the results of the detailed engineering analysis as well as updates on the completed operational and utility improvements, were presented to the Board in February 2019.

Attachments

1. Capital Projects Update – 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

STRATEGIC CORE AREAS SUPPORTED

a People and Places a Research Excellence a Transformative Learning a Local / Global Engagement

DESCRIPTION & RATIONALE

The Capital Projects Update provides summary information on major capital building projects (>\$5 million), routine capital renewals and renovations, Infrastructure Impact Charge (IIC) projects and Information Technology (IT) projects.

Details provided on major building projects include schedule, budget, costs to date, confirmed funding sources, outstanding unfunded amounts, and debt financing requirements for each project. Also included is an estimate of the impact that each project has toward reducing the University's deferred maintenance backlog, either due to demolition of old facilities to make way for new construction or as the result of major building renewal.

A separate section on Capital Priorities is included to show proposed projects currently in planning that have not yet been brought forward for Board 1 approval. These Capital Priorities have been determined through consultation with academic and operational stakeholders on both the Vancouver and Okanagan campuses. Final decisions on capital priorities are made by the UBC Executive and the Board.

Information on major building projects completed since 2010 is also provided.

BENEFITS

Learning, Research,
Financial,
Sustainability &
Reputational

On-going capital investment in physical infrastructure and information technology provides direct support and significant benefit to UBC's core strategy areas – People & Places, Research Excellence, Transformative Learning, Local & Global Engagement.

RISKS Capital projects are subject to cost, schedule and funding risks. These risks are managed through careful planning, on-going monitoring and use of contingency allowances in project budgets. UBC also has in place a Retained Risk Fund (RRF) for building projects >\$2.5 million. The RRF acts as an internal self-insurance fund to address unforeseen cost impacts that cannot otherwise be addressed through standard project contingencies. Each major capital project pays into the RRF and is eligible for support with approval from the Provost and Vice-President, Finance & Operations as per the terms of Policy #125 – Retained Risk Fund for Major Capital Projects.

Financial,
Operational &
Reputational

In addition, the project management teams at both UBC Properties Trust and Project Services (Infrastructure Development) have re-examined their risk and contingency practices in light of the rapidly escalating construction market as well as other current issues faced by project teams including increasing quantities of hazardous materials being discovered in building renewal or demolition projects. While every project has always created a risk register, an updated format with increased focus on quantifying the cost impact of risk has been added. In addition, higher, standardized contingencies have been set for projects moving forward.

Construction escalation has continued to pressure project budgets of all sizes. The Bioenergy Facility Expansion and UBCO Nechako and Skeena Residence projects all required budget increases due in part to these market influences. As has been noted in previous updates, escalation is still present in the both the Kelowna and Vancouver markets so estimates are still carrying a 6% cost escalation contingency.

COSTS Cost details on current projects are provided in the Attachments.

Capital & Lifecycle
Operating

FINANCIAL Funding and financing details on current projects are provided in the Attachments.

Funding Sources,
Impact on Liquidity

SCHEDULE Schedule details on current projects are provided in the Attachments.

Implementation
Timeline

CONSULTATION Major building projects at UBC are developed in consultation with campus stakeholders and are subject to Executive and Board approval processes as well as a review and approval process by Campus & Community Planning (C&CP) for issuance of a development permit (DP). The DP process involves review of the project schematic design by the Advisory Urban Design Panel (AUDP) and the Development Review Committee (DRC). A public open house is held for each DP application in order to engage with the campus community and solicit input on the proposed project.

Relevant Units,
Internal & External
Constituencies

UBC Capital Priorities are developed in accordance with the University's established **Capital Planning Principles**, as follows:

1. **Academic Consultation** - Capital infrastructure needs and priorities are identified through on-going consultation with academic stakeholders including Deans, Provost's Office, Deputy Vice Chancellor Office (Okanagan campus), VP Students Office, VP Research Office and unit heads.
2. **Funding Allocation** - UBC capital funding (exclusive of government funding, self-funding projects such as student housing, and donor funding) should be allocated among infrastructure categories according to the following target ratio: 70% academic, 20% student experience, 10% campus community. This is the best current estimate of the allocation to support learning and research priorities, meet student needs and provide necessary community infrastructure. The allocation model is regularly reviewed. Allocation of UBC capital funding for recent, current and planned projects is as follows:

	Academic	Student Experience	Campus Community
<i>Target allocation</i>	70%	20%	10%
Projects completed since January 1, 2010	58%	17%	25%
Current projects in design or construction	79%	21%	0%
Five-Year Capital Plan projects	95%	5%	0%
Future priorities	84%	13%	3%
Total of all projects above	81%	13%	6%

3. **Operational Overlay** - Building Operations, Energy & Water Services and Risk Management Services are consulted to determine deferred maintenance, seismic and other operational priorities and opportunities for synergies.
4. **Fundraising and Financing Assessment** - The Development Office prepares donor fundraising assessments for specific projects and establishes fundraising goals with reasonable (though not guaranteed) probabilities of success based on known donor prospects. Treasury determines the available financing capacity for specific projects based on current and projected internal liquidity.
5. **Efficiency** - Stated infrastructure needs are assessed against accepted standards. The proposed Capital projects are those that provide the most effective and efficient use of land, building space and capital. Opportunities are sought to optimize and re-use existing infrastructure first before replacing or expanding. Academic priorities are synergized with infrastructure renewal/seismic priorities wherever possible.

6. **Flexibility** - Flexibility is allowed in the Capital Plan in order to respond to emerging priorities and funding opportunities. Funding opportunities and financing capacity are key factors in determining project timing.
7. **Integration** - The Capital Plan is developed through integration of academic needs, strategic priorities, infrastructure renewal and risk management requirements, target UBC funding allocation and alignment with government priorities. The Provost (Vancouver campus) and Deputy Vice Chancellor (Okanagan campus) make the final recommendations on capital priorities to be presented for Executive and Board approval.
8. **Approval** - Capital priorities are reviewed and approved by the Executive, and then the Board of Governors, at least once per year. Mandatory approval is required in advance of submission of the UBC Five-Year Capital Plan to the Province in June each year.
9. **On-going Review** - Minor adjustments to the capital priorities can take place throughout the year in response to emerging issues. The Board receives an up to date list of capital priorities at every Board meeting.

Previous Report Date	September 24, 2019
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Decision	For Information
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Action / Follow Up	
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Capital Projects Update - Summary by Project Type and Board Approval Level
 As of September 30, 2019

Dollar figures are all in \$000's

Project Type/ Approval Level	GBA (s.f.) ¹	Project Budget (\$000's)	Projected Final	Costs to Date	Confirmed Funding Sources								Unfunded	% Unfunded	Reduction to Deferred Maintenance ²	Financing			
					Prov Gov	Fed Gov	UBCV Central	UBCO Central	Land Dvpt Costs or Taxes	Self-Funded	Faculty or Unit Funded	Fundraising				UBC Central Debt	Self-Funded Debt	Faculty / Unit Debt	Total Debt
Infrastructure Projects																			
<i>Major Capital Buildings</i>																			
Board 1 - In design	11,013	\$10,772	\$10,772	\$518	\$0	\$0	\$1,457	\$0	\$500	\$0	\$3,000	\$1,594	\$4,221	39.18%	\$0	\$0	\$3,721	\$0	\$3,721
Board 2 - In design	693,876	\$321,438	\$321,438	\$4,051	\$0	\$0	\$33,910	\$0	\$0	\$279,333	\$5,989	\$0	\$2,206	0.69%	\$0	\$33,910	\$274,437	\$0	\$308,347
Board 3 - In construction	778,411	\$312,200	\$315,221	\$215,847	\$26,279	\$40,137	\$49,844	\$1,957	\$17,329	\$161,606	\$12,278	\$1,416	\$4,376	1.39%	\$79,094	\$49,444	\$161,606	\$0	\$211,050
Complete - Board 4 pending	638,464	\$383,718	\$389,693	\$382,842	\$56,242	\$43,856	\$107,160	\$1,080	\$42,068	\$32,500	\$16,014	\$90,719	\$65	0.02%	\$2,827	\$27,600	\$112,835	\$30,315	\$170,750
Major Capital Building Projects	2,121,764	\$1,028,128	\$1,037,124	\$603,258	\$82,521	\$83,992	\$192,370	\$3,037	\$59,897	\$473,439	\$37,281	\$93,729	\$10,868	1.05%	\$81,921	\$110,954	\$552,599	\$30,315	\$693,868
<i>Routine Capital Projects</i>																			
Building Operations/ Energy & Water Services (Provincial funding)		\$49,140	\$49,140	\$15,661	\$37,276	\$0	\$11,864	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$49,140	\$0	\$0	\$0	\$0
Faculties/Departments		\$332,261	\$329,185	\$40,581	\$5,916	\$10,077	\$0	\$0	\$0	\$0	\$316,269	\$0	\$0	\$0	\$332,261	\$0	\$0	\$0	\$0
Student Housing & Hospitality		\$20,040	\$20,040	\$11,596	\$0	\$0	\$0	\$0	\$0	\$0	\$20,040	\$0	\$0	\$0	\$20,040	\$0	\$0	\$0	\$0
Parking Services		\$4,084	\$3,523	\$1,921	\$0	\$0	\$0	\$0	\$0	\$3,523	\$0	\$0	-\$561	\$0	\$4,084	\$0	\$0	\$0	\$0
Athletics		\$1,094	\$1,094	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$778	\$231	-\$85	\$0	\$1,094	\$0	\$0	\$0	\$0
UBC Okanagan		\$25,576	\$6,363	\$2,653	\$1,758	\$251	\$0	\$11,730	\$0	\$0	\$4,470	\$2,000	-\$5,367	\$0	\$25,576	\$0	\$0	\$0	\$0
Routine Capital Building Projects ³		\$432,195	\$409,344	\$72,412	\$44,950	\$10,328	\$11,864	\$11,730	\$0	\$3,523	\$341,556	\$2,231	-\$6,013	\$0	\$432,195	\$0	\$0	\$0	\$0
Infrastructure Impact Charge (IIC) Projects ⁴		\$1,690	\$2,050	\$360	\$0	\$0	\$0	\$0	\$2,050	\$0	\$0	\$0	\$0	\$0	\$0	\$2,050	\$0	\$0	\$2,050
Subtotal - Infrastructure Projects		\$1,462,013	\$1,448,518	\$676,030	\$127,471	\$94,320	\$204,234	\$14,767	\$61,947	\$476,962	\$378,837	\$95,960	\$4,854	\$0	\$514,116	\$113,004	\$552,599	\$30,315	\$695,918
Information Technology Projects																			
Major IT Projects		\$150,550	\$150,550	\$88,047	\$0	\$0	\$150,550	\$0	\$0	\$0	\$0	\$0	\$0	0.00%	\$0	\$150,550	\$0	\$0	\$0
Routine IT Projects		#VALUE!	#VALUE!	#VALUE!	#VALUE!	\$2,197	\$0	\$13,254	\$1,164	\$0	\$0	\$9,597	\$0	\$13,784	#VALUE!	\$0	\$0	\$0	\$0
Subtotal - IT Projects⁵		#VALUE!	#VALUE!	#VALUE!	#VALUE!	\$2,197	\$150,550	\$13,254	\$1,164	\$0	\$0	\$9,597	\$0	#VALUE!	#VALUE!	\$150,550	\$0	\$0	\$0
Grand Total	\$ 2,121,764	#VALUE!	#VALUE!	#VALUE!	#VALUE!	\$96,517	\$354,784	\$28,021	\$63,111	\$476,962	\$378,837	\$105,557	\$4,854	#VALUE!	#VALUE!	\$263,554	\$552,599	\$30,315	\$695,918

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).

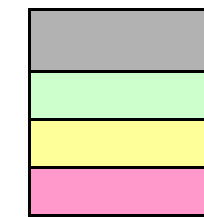
3 - Cyclical maintenance, rehabilitation, upgrade and renovation projects >\$50,000 and <=\$5 million underway or completed in current fiscal year. Includes projects funded by AVED, Building Operations, Energy & Water Services, Faculties/Departments, Student Housing & Hospitality Services (SHHS), Athletics and Parking.

4 - 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.

5 - IT projects, major (>\$5 million) and routine (>\$50,000 and <=\$5 million), currently in planning/design or completed in the fiscal year.

Major Capital Building Projects - Detailed Information

As of September 30, 2019
Dollar figures are all in \$000's



Grey = Complete, Board 4 Pending
Green = Board 3
Yellow = Board 2
Pink = Board 1

Dollar figures are all in \$000's

Attachment 2

Project Name	Faculty / Dep.	Schedule			Capital Cost				Current Status/ Issues + Variances	Funding								Reduction to Deferred Maintenance	Financing				Funding/Financing Comments		
		Target Completion Final Approved ¹	% Compl.	Actual Completion (Occupancy)	Gross Building Area (SF) Final Approved	Budget Final Approved	Projected Final Cost	Costs to Date		Confirmed Funding Sources									UBC Central Debt	Self-Funded	Faculty/ Unit Debt	Total Debt			
		Prov Gov	Fed Gov	UBCV Central	UBCO Central	Land Dvpt Cost or Taxes	Self-Funded	Faculty or Unit Funded		Fundraising	Unfunded	% Unfunded	UBC Central Debt	Self-Funded	Faculty/ Unit Debt	Total Debt									
UBC-Vancouver																									
Djavad Mowafaghian Centre for Brain Health	Vancouver Coastal Health/ Centre for Brain Research	OCT-13	100%	NOV-13	152,558	\$69,757	\$72,501	\$69,262	Completed and occupied. Basement fit-out underway for Preclinical Discovery Centre (PDC). Additional PDC cost covered by internal sources.	\$24,565	\$19,716	\$1,348			\$1,600	\$25,271	\$0	0.00%					\$0	Included in the Faculty fundraising amount is approx \$3.4M investment income earned from provincial and federal funding received.	
Baseball Training Facility	Athletics	DEC-15	100%	SEP-15	20,000	\$3,500	\$3,885	\$3,885	Completed and occupied. Costs include \$416K in client-requested scope additions which have been recovered from client.						\$269	\$3,616	\$0	0.00%					\$0	Project has gone over the budget due to client-requested scope additions. Unfunded amount amount to be covered by Athletics.	
Iona Building Acquisition- Vancouver School of Economics	Arts	DEC-15	100%	DEC-15	99,663	\$33,500	\$34,231	\$33,995	Completed and occupied. Arts funded \$500k for additional 100-seat lecture theatre.			\$15,000	\$231		\$2,300	\$5,600	\$11,100	\$0	0.00%		\$15,000		\$18,500	\$33,500	Arts added \$0.5M for 100 seat lecture theatre.
UBC Vancouver District Energy System	Energy & Water Services	DEC-15 Old Steam Plant Demo DEC-16	97%	JUN-16 Old Steam Plant Demo TBD	N/A	\$88,300	\$88,300	\$85,594	System completed and in-use. Allowance remaining for demolition of old Powerhouse.	\$6,955		\$71,345		\$10,000				\$0	0.00%			\$71,345		\$71,345	Received 6.95M from AVED. Max of \$78.3M internal financing to be repaid from Energy & Water Services budget using cost savings generated by the project.
Aquatic Centre	Athletics	NOV-16	100%	DEC-16	83,842	\$39,900	\$39,900	\$39,910	Complete and occupied. Sauna, steam room and an additional storage was added during construction and funded within the budget					\$28,500			\$11,410	\$0	0.00%			\$11,290		\$11,290	
Henry Angus Tower - Seismic Upgrades	C&CP	SEP-16	114%	JAN-17		\$4,162	\$4,592	\$4,735	Completed and occupied. Additional costs related to utility system damage to be recovered from contractor insurance.			\$4,592						\$0	0.00%					\$0	
Quantum Matter Institute / Advanced Materials & Process Engineering Laboratory	Applied Science/ Science	OCT-16	106%	APR-17	51,667	\$30,269	\$32,156	\$32,029	Rooms 241 & 243 in the Brimacombe Building are being renovated as a final phase, at the request of the Dean of Science. The work is anticipated to be complete by December 2019		\$3,345	\$13,475			\$7,336	\$8,000	\$0	0.00%		\$12,600		\$3,323	\$15,923		
National Soccer Development Centre - Field House Training Facility & Practice Fields (Vancouver Whitecaps - UBC Athletics Partnership)	Athletics	Fields OCT-15 Fieldhouse DEC-16	95%	JUN-17	37,980	\$27,805	\$26,356	\$26,356	Completed and occupied. UBCPT cost to date doesn't include the Doug Mitchell change room reno cost (\$1,042,024) which was part of approved budget.	\$14,106		\$1,400		\$3,568		\$7,282	\$0	0.00%					\$0	UBCPT contributing total of 3.3M (825K for Core project + 2.475M for relocation cost to consolidate uses within Thunderbird Park) to the project.	
Museum of Anthropology - Northwest Coast Masterworks Gallery	Arts	MAR-17	89%	JUN-17	2,700	\$4,100	\$4,100	\$3,659	Completed and occupied. Some remaining deficiency work to address.		\$1,500						\$2,600	\$0	0.00%	\$0				\$0	
Indian Residential School History & Dialogue Centre	First Nations House of Learning	JUL-17	96%	JUN-17	6,523	\$5,800	\$5,800	\$5,559	Completed and occupied. AV exhibit is on-going and is being completed by client. The value of AV is approx. 1.3M. The additional \$300K is a funded increase.						\$300	\$5,500	\$0	0.00%	\$0				\$0		
Totem Park Residence In-Fill (Phase 2)	SHHS	AUG-17	100%	JUL-17	99,951	\$30,200	\$30,200	\$30,200	Completed and occupied. Sports Court costs (\$1.3m) funded by SHHS as an extra/scope add to the project.						\$30,200			\$0	0.00%	\$0		\$30,200		\$30,200	\$30.2M internal loan to be repaid with future rental revenue.
Sports Medicine Centre - Chan Gunn Pavilion	Medicine/ Education (Kinesiology)	SEP-17	102%	OCT-17	21,173	\$11,425	\$11,640	\$11,625	Final occupancy received. \$215K overage projected that is to be covered by Sports Medicine & Kinesiology.		\$4,731				\$909	\$5,936	\$64	0.55%	\$2,827			\$716	\$716	Funding shortage due to share donation realized at lower than original expected amount.	
IIC Public Realm Projects	C&CP	To be completed in		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	Please refer to IIC Plan				\$0	Public Realm projects are funded by Infrastructure Impact Charges.	
Geological Field School	Science	TBC	16%		10,824	\$2,400	\$2,400	\$391	Donor funding commitment received Oct 2018. Project remobilising. Detailed design underway and ESDP Received & BP Submission awaiting approval (once flood risk is waived). Start on site anticipated Nov 2019.							\$1,027	\$1,373	57.21%					\$0	Unfunded amount is expected to be filled from fundraising.	
Undergraduate Life Sciences Teaching Labs Renew	Science/ Medicine	JAN-19	100%		176,625	\$88,000	\$91,000	\$87,785	Users have moved in and are currently teaching in the labs. Contractor delay claims settled, but consultant's claim outstanding. Will result in approx \$3m additional cost. This will be funded equally through Central contingency and Retained Risk Fund.	\$11,838	\$32,528	\$43,635					\$3,000	3.30%	\$39,547	\$43,235			\$43,235	43.2M loan will be paid from Central operating budget.	
UBC Exchange (New Bus Transit Terminal)	C&CP	AUG-19	97%		N/A	\$21,750	\$21,750	\$21,041	Project occupancy received in May. Tracking under budget.	\$9,421				\$12,329				\$0	0.00%	\$0				\$0	TransLink to provide up to \$8.84 M plus an allowance for cost escalation.
Exchange Residence (at Gage South)	SHHS	AUG-19	98%		290,000	\$76,973	\$76,973	\$75,099	Project occupancy received in May. Tracking under budget.						\$76,973			\$0	0.00%	\$0		\$76,973		\$76,973	Project currently proposed to be financed through an internal loan.
MacInnes Field Underground Parkade	Parking	SEP-20	100%		64,966	\$12,435	\$12,435	\$12,435	Final occupancy received and facility is being occupied. Project is on budget.						\$12,435			\$0	0.00%			\$12,435		\$12,435	
Graduate Research Commons/Koerner Library Interrelated Projects	Science/ Medicine	JAN-19	74%		19,041	\$6,710	\$6,710	\$4,979	Four out of five project phases are complete. Final phase scheduled for completion in June 2019.			\$6,209			\$109	\$389	\$3	0.04%	\$39,547	\$6,209				\$6,209	6,209 internal loan services from central operating budget with 398 from donor funding and 100 from Copyright Services
Bioenergy Facility Expansion Project	EWS	SEP-20	9%			\$20,361	\$20,361	\$1,920	Design complete. Tenders received. Project is within budget. Construction contracts to be awarded.	\$5,000	\$7,609			\$5,000	\$2,752			\$0	0.00%			\$2,752		\$2,752	\$2.752M loan will be paid by Energy & Water Services from savings achieved compared to a business as usual (BAU) situation. Short-term bridge financing may be required. AVE will take out a loan and repaid using future student fees collect. Unfunding portion is expected to be filled from fundraising.
Arts Student Centre	Arts	JUL-21	5%		11,013	\$10,772	\$10,772	\$518	Revised Board 1 approval obtained September 2019. Project is on track for a July 2021 completion.			\$1,457		\$500	\$3,000	\$1,594	\$4,221	39.18%				\$3,721		\$3,721	Faculty of Arts & Dept of Psychology will fund this project from reserves.
Douglas T. Kenny Building 4th Floor Renovation	Arts	DEC-19	21%		15,650	\$7,640	\$7,640	\$1,613	Project now has Board 3 approval						\$7,640			\$0	0.00%					\$0	
Pacific Residence	SHHS	JUL-21	2%		365,876	\$165,034	\$165,034	\$3,102	Budget increase approved at Board 3. Project underway as of Oct 8, 2018.						\$165,034			\$0	0.00%			\$160,138		\$160,138	153.1M loan will be repaid with future rental revenue.
Brock Commons Phase 2 Mixed-Use Housing Development	SHHS	Sep-22	1%		328,000	\$156,404	\$156,404	\$949	Board 2 approval received.			\$33,910			\$114,299	\$5,989		\$2,206	1.41%		\$33,910	\$114,299		\$148,209	Discussions are underway with Peter A. Allard School of Law to confirm its funding for the legal clinic space.
SUBTOTAL (UBC-V)					1,858,052	\$917,197	\$925,139	\$556,641		\$71,885	\$69,429	\$192,370	\$231	\$59,897	\$403,993	\$32,752	\$83,725	\$10,867	1.17%	\$81,921	\$110,954	\$483,153	\$22,539	\$616,646	
UBC-Okanagan																									
Teaching & Learning Centre (The Commons)	UBCO Library	APR-18	100%	DEC-18	62,407	\$35,000	\$36,033	\$36,033	Elevator & drip pans in special collections vault are the only post occupancy work remaining. Anticipated completion is prior to end of November.	\$10,616	\$14,564		\$849			\$10,004	\$0	0.00%				\$7,776	\$7,776	Unfunded amount due to cost overrun and most likely will be cover by Student Levy.	
Nechako Residence	SHHS	JAN-21	9%		128,654	\$50,950	\$50,950	\$4,421	Construction underway. Completion targeted summer 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	SHHS	AUG-20	25%		72,651	\$24,981	\$25,002	\$6,163	Construction underway. Completion targeted summer 2020	\$20					\$22,812	\$2,170		\$0	0.00%			\$22,812		\$22,812	Capital cost to be internally financed with debt service paid from systemwide student housing rental and meal plan revenue.
SUBTOTAL (UBC-O)					263,712	110,931	111,985	46,617		\$10,636	\$14,564	\$0	\$2,806	\$0	\$69,446	\$4,529	\$10,004	\$0	0.00%	\$0	\$0	\$69,446	\$7,776	\$77,222	
GRAND TOTAL					2,121,764	\$1,028,128	\$1,037,124	\$603,258		\$82,521	\$83,992	\$192,370	\$3,037	\$59,897	\$473,439	\$37,281	\$93,729	\$10,868	1.05%	\$81,921	\$110,954	\$552,599	\$30,315	\$693,868	

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.

Information Technology (IT) Projects - Detailed Information

Projects underway of completed in the past 12 months - as of September 30, 2019

Dollar figures are all in \$000's

Attachment 3

Complete
Board 3 - Implementation
Board 2 - In design
Board 1 - In design
In Planning or Design

Project Name	Faculty / Dep.	Project Rep.	% Compl.	Actual Compl. (Occu.)	Project Budget Final	Projected Final Cost	Costs to Date	Current Status	Issues/Comments	Funding								Financing							
										Confirmed Funding Sources								Unfunded	% Unfunded	UBC Central Debt	Self-Funded	Faculty/Unit Debt	Total Debt	Funding/Financing Comments	
										Prov Gov	Fed Gov	UBCV Central	UBCO Central	Land Dvpt Cost or Taxes	Self-Funded	Department Funded	Fundraising								
IT - Major Capital (>\$2.5m)																									
Integrated Renewal Program (based on funding release only)				Mar-24	\$ 86,400	\$ 86,400	\$ 70,373	Board 3 - Implementation	Board 3 - Implementation			\$ 86,400						\$0	0%		\$ 86,400				Financing determined
Application Ecosystem Program (based on funding release only)				Mar-23	\$ 40,300	\$ 40,300	\$ 5,876	Board 3 - Implementation	Board 3 - Implementation			\$ 40,300									\$ 40,300				Financing determined
Enterprise Data Integration	UBCV			Mar-19	\$ 5,250	\$ 5,250	\$ 3,898	Board 3 - Implementation	Board 3 - Implementation			\$ 5,250						\$0	0%		\$ 5,250				Financing determined
Digital Research Infrastructure	VPRI - Office of Research Services			Dec-19	\$ 18,600	\$ 18,600	\$ 7,900	Board 2 - In design				\$ 18,600									\$ 18,600				Excellence Fund
Total - Major IT					\$ 150,550	\$ 150,550	\$ 88,047					\$ -	\$ -	\$ 150,550	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 150,550	\$ -	\$ -	\$ -	

