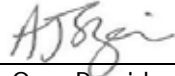


SUBJECT	CAPITAL PROJECTS UPDATE
MEETING DATE	APRIL 18, 2019

Forwarded on the Recommendation of the President

**APPROVED FOR
SUBMISSION**



for Santa J. Ono, President and Vice-Chancellor

FOR INFORMATION

Report Date	March 15, 2019
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Presented By Peter Smalles, Vice-President Finance & Operations
 Andrew Szeri, Provost & Vice-President Academic
 Deborah Buszard, Deputy Vice-Chancellor & Principal, UBC Okanagan
 Robin Ciceri, Vice-President External Relations
 Pam Ratner, Vice-Provost & AVP 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 thirteen major building projects in construction or design, with a total value of \$664 million. Ten projects are on the Vancouver campus, including the new UBC Exchange Bus Terminal and Exchange Student Residence. Three projects are on the Okanagan campus, including the Teaching & Learning Centre (“The Commons”) and two student housing projects. 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.

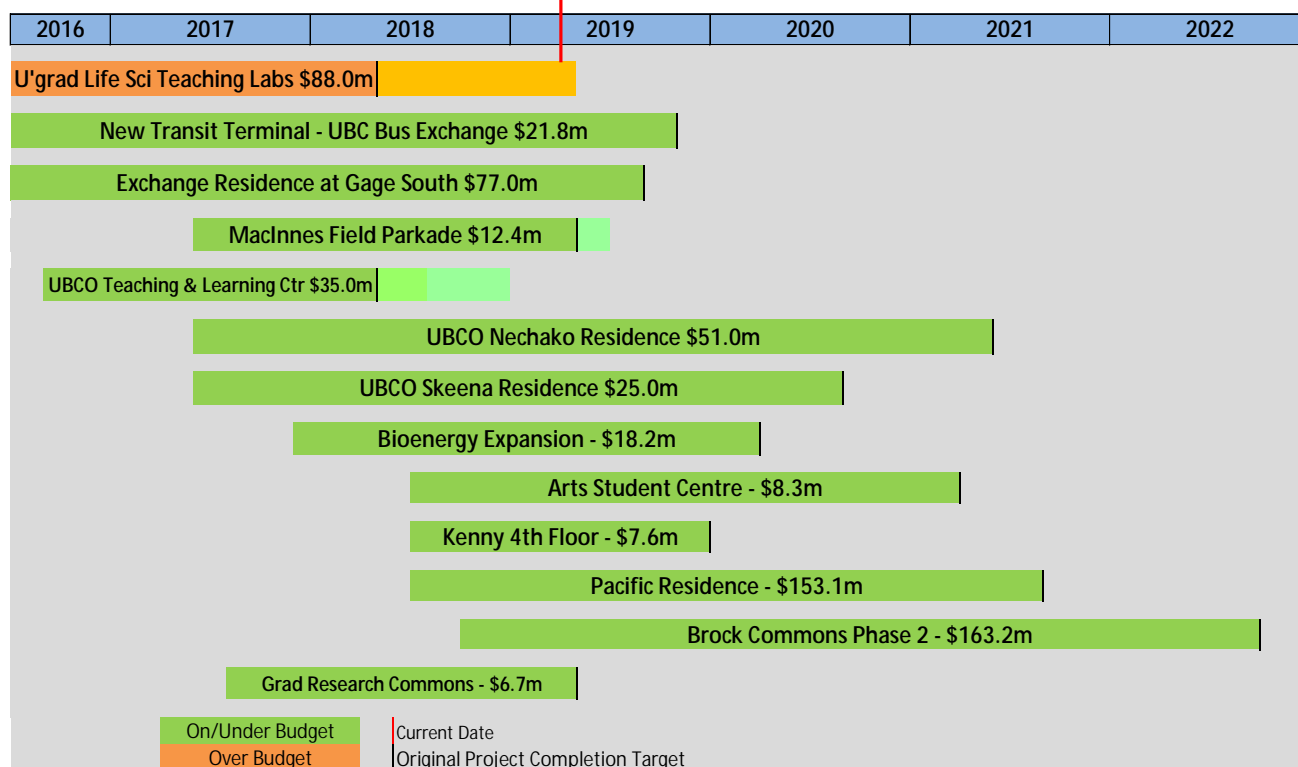
The highly active construction markets in Vancouver and Kelowna are currently resulting in reduced trade contractor availability, low bid coverage on tenders and escalating costs. These challenges have impacted recent and current UBC projects and are resulting in the need for budget adjustments and in 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 has been increased from \$80 million to \$88 million. This was approved by the Board in February 2018. Recent contractor delay claims are putting additional pressure on the project budget. The project team is working to resolve these claims.

- Graduate Research Commons/Koerner Interrelated Projects – In late 2018, the budget was increased from \$4.30m, originally set in 2014, 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 savings. Nechako increased by \$2.76m (5.7%) due to complex mixed-use design requirements as well as cost escalation.
- MacInnes Field Parkade – Increased concrete and excavation costs were managed through a cost sharing plan with the MacInnes Field public realm project. There is still a small cost risk due to a 2 month extension to the project schedule.
- 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 \$6.97 million on March 6, 2019. This includes \$6.58m for the Vancouver campus and \$0.39m for the Okanagan campus. The following projects have recently received support from the Fund:
 - Orchard Commons/Vantage College - \$2.30m for construction coordination issues and overtime costs to achieve completion deadline. This amount represents 1.7% of total project cost and has now been paid out.
 - Quantum Matter Institute - \$0.60m due to construction delay costs (construction manager general conditions, construction financing) and additional roof installation costs not recoverable from trades or design team. This amount represents 1.9% of total project cost and has now been paid out.

The Retained Risk fund balances noted above 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



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.

Upcoming Board Approval Requests

Project Name	Apr 2019	Jun 2019	Sep 2019	Dec 2019
Arts Student Centre		Board 2	Board 3	
Douglas T. Kenny Building Fourth Floor Renovation	Board 3			
Pacific Residence	Board 2		Board 3	
The Hive @ UBC Farm			Board 1	
Brock Commons Phase 2 Mixed-Use Student Housing		Board 2		

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:

- 2017/18: \$39.49m (received)
- 2018/19: \$39.50m (received)
- 2019/20: \$39.50m (planned)
- 2020/21: \$39.50m (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 - \$420k
- Michael Smith Labs chiller - \$700k
- Biomedical Research Centre, Old Admin Building fire alarm renewal - \$300k
- Scarfe Office Block elevator renewal - \$450k
- Chemistry Physics Building envelope sealing - \$1.10m

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 have moved to Old SUB for the duration of construction.
- Museum of Anthropology roofing, envelope and seismic upgrade - \$22m (2018/19, 2019/20, 2020/21). Design nearing completion. Construction to start in summer 2019.
- MacLeod Building renewal and seismic upgrade - \$48m (2019/20, 2020/21, 2021/22). Design to commence in 2019/20.

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.

- 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) Faculty of Medicine Dean's Office, Djavad Mowafaghian Centre for Brain Health - \$3.30m
 - Provides office space that will house the Faculty of Medicine Dean's Office, bringing several staff groups together that are now housed separately and allowing for future growth.
- 6) Integrated Health Services Short Term Solutions - \$3.69m
 - Provides space to meet the demand for student health services between 2019 and 2022, after which the services will be housed in Brock Commons Phase 2. 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.
- 7) 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 Board of Governors approved the latest Five-Year Capital Plan (2019/20 – 2023/24) in June 2018.

In addition, the most recent UBC Capital Priorities (Top 15 + Future Priorities) were approved by the Board in June 2018. 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 2018 round of capital planning are as follows:

1) University Strategic Priorities

- Collaboration, Inclusion, Innovation – 20% weighting
- People & Places – 20%
- Research Excellence – 20%

- Transformative Learning – 20%
- Local & Global Engagement – 20%

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%

Note that the above criteria and weighting are under consideration for change as part of the 2019 capital planning process.

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, was 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 Ongoing capital investment in physical infrastructure and information technology provides direct support and significant benefit to UBC's core objectives of teaching, learning, research excellence, student experience and community 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 UBCO Nechako Commons and Skeena Residence projects and MacInnes Field Parkade are all experiencing cost pressures due to these market influences. The teams are currently working to try to keep these projects within budget.

As has been noted in previous updates, steep 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:

- 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.
- 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	80%	20%	0%
Five-Year Capital Plan projects	78%	16%	6%
Future priorities	78%	21%	1%
Total of all projects above	70%	18%	12%

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	February 12, 2019
Decision	For Information
Action / Follow Up	

Capital Projects Update - Summary by Project Type and Board Approval Level

As of December 31, 2018

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	739,800	\$339,409	\$340,409	\$1,669	\$5,000	\$0	\$37,079	\$0	\$5,500	\$267,216	\$17,564	\$5,315	\$0	0.00%	\$0	\$37,079	\$272,531	\$15,064	\$324,674
Board 2 - In design	92,149	\$32,621	\$32,621	\$1,063	\$0	\$0	\$0	\$0	\$0	\$22,812	\$9,809	\$0	\$0	0.00%	\$0	\$0	\$22,812	\$0	\$22,812
Board 3 - In construction	752,517	\$294,215	\$294,658	\$202,353	\$31,294	\$47,092	\$49,844	\$2,400	\$12,910	\$136,042	\$2,359	\$12,276	\$12,400	4.21%	\$79,094	\$49,444	\$136,042	\$9,820	\$195,306
Complete - Board 4 pending	1,024,863	\$525,657	\$532,608	\$523,910	\$44,176	\$32,094	\$133,608	\$0	\$42,150	\$162,513	\$15,014	\$98,053	\$101,925	19.14%	\$2,827	\$53,600	\$234,973	\$41,656	\$330,229
Major Capital Building Projects	2,609,329	\$1,191,902	\$1,200,296	\$728,995	\$80,470	\$79,186	\$220,530	\$2,400	\$60,560	\$588,583	\$44,746	\$115,644	\$114,325	9.52%	\$81,921	\$140,123	\$666,358	\$66,540	\$873,021
<i>Routine Capital Projects</i>																			
Building Operations		\$118,703	\$117,403	\$71,632	\$89,352	\$0	\$27,334	\$0	\$0	\$0	\$2,017	\$0	\$0	\$0	\$118,703	\$0	\$0	\$0	\$0
Energy & Water Services		\$2,495	\$3,144	\$1,177	\$2,495	\$0	\$0	\$0	\$0	\$649	\$0	\$0	\$649	\$0	\$2,495	\$0	\$0	\$0	\$0
Faculties/Departments		\$85,165	\$83,219	\$48,893	\$7,727	\$15,604	\$0	\$0	\$0	\$0	\$61,834	\$0	\$0	\$0	\$85,165	\$0	\$0	\$0	\$0
Student Housing & Hospitality		\$20,482	\$21,993	\$18,593	\$0	\$0	\$0	\$0	\$0	\$0	\$21,993	\$0	\$1,512	\$0	\$20,482	\$0	\$0	\$0	\$0
Parking Services		\$2,149	\$1,824	\$801	\$0	\$0	\$0	\$0	\$0	\$2,149	\$0	\$0	\$0	\$0	\$2,149	\$0	\$0	\$0	\$0
Athletics		\$743	\$623	\$239	\$0	\$0	\$0	\$0	\$0	\$0	\$743	\$0	\$0	\$0	\$743	\$0	\$0	\$0	\$0
UBC Okanagan		\$19,060	\$19,145	\$12,042	\$1,141	\$1,505	\$0	\$9,948	\$0	\$0	\$5,552	\$1,000	\$85	\$0	\$19,060	\$0	\$0	\$0	\$0
Routine Capital Building Projects³		\$248,795.84	\$247,352.65	\$153,377.62	\$100,714.02	\$17,108.76	\$27,334.21	\$9,947.61	\$0.00	\$2,798.34	\$92,138.74	\$1,000.00	\$2,245.84	\$0.01	\$248,795.84	\$0.00	\$0.00	\$0.00	\$0.00
Infrastructure Impact Charge (IIC) Projects⁴		\$10,506.00	\$45,136.00	\$6,739.77	\$0.00	\$0.00	\$0.00	\$0.00	\$45,136.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$45,136.00	\$0.00	\$0.00	\$45,136.00
Subtotal - Infrastructure Projects		\$1,451,204.22	\$1,492,784.67	\$889,112.39	\$181,184.02	\$96,294.51	\$247,864.35	\$12,347.61	\$105,696.00	\$591,381.24	\$136,884.59	\$116,644.00	\$116,570.84	\$0.08	\$330,716.84	\$185,259.00	\$666,357.90	\$66,540.00	\$918,156.90
Information Technology Projects																			
Major IT Projects		\$103,060	\$101,660	\$54,588	\$0	\$0	\$100,460	\$0	\$0	\$0	\$2,600	\$0	\$0	0.00%	\$0	\$81,960	\$0	\$0	\$0
Routine IT Projects		\$35,274	\$34,297	\$23,213	\$2,705	\$0	\$16,651	\$508	\$0	\$60	\$13,818	\$0	\$1,315	3.73%	\$0	\$0	\$0	\$0	\$0
Subtotal - IT Projects⁵		\$138,334	\$135,957	\$77,801	\$2,705	\$0	\$117,111	\$508	\$0	\$60	\$16,418	\$0	\$1,315	0.97%	\$0	\$81,960	\$0	\$0	\$0
Grand Total	\$ 2,609,329	\$1,589,538	\$1,628,742	\$966,913	\$183,889	\$96,295	\$364,975	\$12,856	\$105,696	\$591,441	\$153,303	\$116,644	\$117,886	7.24%	\$330,717	\$267,219	\$666,358	\$66,540	\$918,157

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 February 15, 2019
Dollar figures are all in \$000's



Dollar figures are all in \$000's

Attachment 2

Project Name	Faculty / Dep.	Schedule				Gross Building Area (SF) Final Approved	Capital Cost				Current Status/ Issues + Variances	Funding									Reduction to Deferred Maintenance	Financing				Funding/Financing Comments
		Target Compl. at Board 3	Target Completion Final Approved	% Compl.	Actual Completion (Occupancy)		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	OCT-13	100%	NOV-13	152,558	\$69,757	\$71,676	\$69,056	Completed and occupied. Basement fit-out underway for Preclinical Discovery Centre (PDC). Additional PDC cost covered by internal sources.	\$24,565	\$19,716	\$1,224		\$900	\$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.			
Robert H Lee Alumni Centre	Alumni Association	APR-15	APR-15	100%	APR-15	41,700	\$19,515	\$19,515	\$19,145	Completed and occupied.			\$1,272			\$18,243	\$0	0.00%	\$1,000	\$11,117	\$12,117	Any additional cost will be filled from Alumni fundraising if needed.				
Student Union Building	AMS	SEP-14	NOV-14 to JUN-15	100%	MAY-15	253,750	\$106,760	\$108,065	\$107,746	Completed and occupied.			\$25,000		\$82,940	\$125	\$0	0.00%	\$25,000	\$68,000	\$93,000	Debt financing will be required for the project. \$68.0M of the loan will be funded by future AMS student levy, and \$25.0M will be funded from future UBC operating budget.				
Baseball Training Facility	Athletics	DEC-15	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	DEC-15	100%	DEC-15	99,663	\$33,500	\$34,000	\$33,995	Completed and occupied. Arts funded \$500k for additional 100-seat lecture theatre.			\$15,000		\$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	DEC-15 Old Steam Plant Demo DEC-16	97%	JUN-16 Old Steam Plant Demo TBD	N/A	\$88,300	\$88,300	\$85,732	System completed and in-use. Allowance remaining for demolition of old Powerhouse.	\$6,955		\$71,345	\$10,000			\$0	0.00%		\$78,300	\$78,300	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	MAR-16	NOV-16	100%	DEC-16	74,448	\$39,900	\$39,910	\$39,910	Complete and occupied.				\$28,500		\$6,410	\$5,000	12.53%		\$11,400	\$11,400	Unfunded amount to be filled from fundraising or Athletics operating budget. Internal loan of 6.29M has already been set up.				
Henry Angus Tower - Seismic Upgrades	C&CP	SEP-16	SEP-16	94%	JAN-17		\$4,162	\$4,592	\$4,300	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	AUG-16	OCT-16	100%	APR-17	51,667	\$30,269	\$32,156	\$32,015	AMPEL renovation complete.		\$3,345	\$13,475		\$7,336	\$8,000	\$0	0.00%	\$12,600	\$11,323	\$23,923					
National Soccer Development Centre - Field House Training Facility & Practice Fields (Vancouver Whitecaps - UBC Athletics Partnership)	Athletics	JUN-15 Fieldhouse DEC-16	Fields OCT-15 Fieldhouse DEC-16	100%	JUN-17	37,980	\$27,244	\$27,244	\$26,321	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.	\$11,006		\$1,400	\$3,650		\$11,188	\$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	MAR-17	91%	JUN-17	2,700	\$4,100	\$4,100	\$3,715	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	JUL-17	100%	JUN-17	6,523	\$5,500	\$5,800	\$5,442	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	Undesignated donor funding has been allocated to cover the full project cost.			
Brook Commons Phase 1 - Tall Wood Student Residence	SHHS	SEP-17	SEP-17	100%	JUL-17	162,750	\$51,525	\$51,525	\$50,823	Completed and occupied. Project anticipated to be under budget.	\$1,650	\$2,802			\$47,073		\$0	0.00%	\$0	\$47,073	\$47,073	\$47,073	\$47.1M internal loan to be repaid with future rental revenue.			
Totem Park Residence In-Fill (Phase 2)	SHHS	AUG-17	AUG-17	98%	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	SEP-17	100%	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	\$6,000	\$0	0.00%	\$2,827		\$716	\$716	Anticipated cost overrun will be covered by Athletic.			
IIC Public Realm Projects	C&CP	To be completed in phases over a 15 year period.	To be completed in phases over a 15 year period.			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	8%		10,824	\$2,400	\$2,400	\$195	Funding commitment received by Donor (Oct 2018) Project retooling. Detailed design underway and DP application anticipated in January 2019.						\$1,958	\$442	18.42%			\$0	Unfunded amount is expected to be filled from fundraising.				
Undergraduate Life Sciences Teaching Labs Renew	Science/ Medicine		JAN-19	84%		176,625	\$88,000	\$88,000	\$73,683	Construction underway. \$8m budget revision was approved to address construction market conditions and site conditions. Delays due to weather and hazardous materials discovered during demolition. Occupancy is scheduled for Mar-July 2019.	\$11,838	\$32,528	\$43,635			\$0	0.00%	\$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	90%		N/A	\$21,750	\$21,750	\$19,263	Currently on budget and on schedule.	\$8,840		\$12,910			\$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	90%		290,000	\$76,973	\$76,973	\$63,428	Currently on budget and on schedule.					\$76,973		\$0	0.00%	\$0	\$76,973	\$76,973	Project currently proposed to be financed through an internal loan.				
Madness Field Underground Parade	Parking	DEC-18	SEP-20	61%		64,966	\$12,435	\$12,435	\$7,579	UBC has implemented a change to the exterior finish of the canopy structure above the parking lot from painted to galvanized and painted. Budget and schedule impacts are currently being reviewed.					\$12,435		\$0	0.00%		\$12,435	\$12,435					
Graduate Research Commons/Koerner Library Interrelated Projects	Science/ Medicine		JAN-19	65%		19,041	\$6,707	\$6,707	\$1,516				\$6,209		\$498	\$0	0.00%	\$39,547	\$6,209	\$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	4%			\$14,850	\$14,850	\$590		\$5,000		\$5,000	\$4,850		\$0	0.00%			\$4,850	\$4,850	\$4,850	\$4.85M 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 to address multi-year timing of IIC and CNCP Funding.			
Arts Student Centre	Arts		MAR-21	1%		9,800	\$8,315	\$9,315	\$92	Budget increased by \$1M. Design revised to align with new budget, but kept intent as presented at AUDP Pre Application. Gross building area reduced to 9,800 square feet. DP Application submitted Feb 28th. Board 2 scheduled for June.			\$500		\$2,500	\$5,315	\$1,000	10.74%		\$5,315	\$5,315	\$5,315	AMS will take out a loan and repaid using future student fees collect.			
Douglas T. Kenny Building 4th Floor Renovation	Arts		DEC-19	5%		15,650	\$7,640	\$7,640	\$399					\$7,640		\$0	0.00%				\$0	Faculty of Arts & Dept of Psychology will fund this project from reserves.				
Pacific Residence	SHHS		JUL-21	1%		370,000	\$153,082	\$153,082	\$987	Project massing continues to be challenged by AUDP. Resubmission to be made in March with altered massing (including program reduction). Escalation continues to be significant. Late massing changes has put additional pressure on the schedule. Sequenced delivery (before and after July 2021) will be explored. Costing updated underway underway.					\$153,082		\$0	0.00%		\$153,082	\$153,082	\$153,082	153.1M loan will be repaid with future rental revenue.			
Brook Commons Phase 2 Mixed-Use Housing Development	SHHS		Sep-22	0%		360,000	\$163,162	\$163,162	\$0	SD ongoing. Project will be going as pre-app to AUDP in March. Massing still under review.			\$37,079		\$109,284	\$15,064	\$1,735	1.06%		\$37,079	\$109,284	\$15,064	\$161,427	Discussions are underway with Peter A. Allard School of Law to confirm its funding for the legal clinic space.		
SUBTOTAL (UBC-V)						2,341,769	\$1,080,971	\$1,088,922	\$691,642		\$69,854	\$64,622	\$220,530	\$0	\$60,569	\$519,137	\$40,218	\$105,824	\$8,177	0.75%	\$81,921	\$140,123	\$596,912	\$56,720	\$793,755	
UBC-Okanagan																										

Major Capital Building Projects - Detailed Information

As of February 15, 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

Project Name	Faculty / Dep.	Schedule				Gross Building Area (SF) Final Approved	Capital Cost			Current Status/ Issues + Variances	Funding								Reduction to Deferred Maintenance	Financing				Funding/Financing Comments		
		Target Compl. at Board 3	Target Completion Final Approved ¹	% Compl.	Actual Completion (Occupancy)		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 Dypt Cost or Taxes	Self-Funded	Faculty or Unit Funded	Fundraising							Unfunded	% Unfunded
Teaching & Learning Centre (The Commons)	UBCO Library		APR-18	100%		62,407	\$35,000	35,443	\$35,443	Final occupancy achieved (Dec 21, 2018). Resolving minor deficiencies	\$10,616	\$14,564		\$443				\$9,820	\$0	0.00%				\$9,820	\$9,820	Fundraising portion will be cover from Student Levy.
Nechako Residence	SHHS		JAN-21	2%		128,654	\$50,950	50,950	\$1,246	Board 3 completed. Tender on budget. Construction starting.				\$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	3%		76,499	\$24,981	24,981	\$664	Board 3 completed. Tender on budget. Construction starting.						\$22,812	\$2,169		\$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)						267,560	110,931	111,374	37,353		\$10,616	\$14,564	\$0	\$2,400	\$0	\$69,446	\$4,528	\$9,820	\$0	0.00%	\$0	\$0	\$69,446	\$9,820	\$79,266	
GRAND TOTAL						2,609,329	\$1,191,902	\$1,200,296	\$728,995		\$80,470	\$79,186	\$220,530	\$2,400	\$60,560	\$588,583	\$44,746	\$115,644	\$8,177	0.68%	\$81,921	\$140,123	\$666,358	\$66,540	\$873,021	

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 December 31, 2018

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 #	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 Year 1 (Student/HR/Fin)				Mar-22	\$ 60,000	\$ 60,000	\$ 37,885	Board 3 - Implementation	Board 3 - Implementation			\$ 60,000					\$ 0	0%	\$ 60,000					Financing determined			
	Integrated Renewal Program Years 2-4 (Student/HR/Fin)				Mar-22	tbd	tbd	\$ -	Board 3 - Implementation	Board 3 - Implementation			tbd							tbd					Financing determined			
	Recruitment - Customer Relationship Management (CRM) System	UBCV			Mar-19	\$ 7,710	\$ 7,710	\$ 6,096	Board 3 - Implementation	Board 3 - Implementation			\$ 6,110			\$ 1,600		\$ 0	0%	\$ 6,110					Financing determined			
	Learning Technology Ecosystem Renewal	UBCV			Mar-19	\$ 6,000	\$ 4,600	\$ 3,677	Board 3 - Implementation	Board 3 - Implementation			\$ 6,000					\$ 0	0%	\$ 6,000					Financing determined			
	Enterprise Data Integration	UBCV			Mar-19	\$ 5,250	\$ 5,250	\$ 3,318	Board 3 - Implementation	Board 3 - Implementation			\$ 5,250					\$ 0	0%	\$ 5,250					Financing determined			
	Digital Research Infrastructure	VPRI - Office of Research Services			Dec-19	\$ 18,500	\$ 18,500	\$ 3,500	Board 2 - In design				\$ 18,500												Excellence Fund			
	Enterprise Maintenance Management System	UBCV			Feb-20	\$ 5,600	\$ 5,600	\$ 112	Board 2 - In design				\$ 4,600			\$ 1,000		\$ 0	0%	\$ 4,600					Financing determined			
	Total - Major IT					\$ 103,060	\$ 101,660	\$ 54,588				\$ -	\$ -	\$ 100,460	\$ -	\$ -	\$ -	\$ 2,600	\$ -	\$ -	0%	\$ 81,960	\$ -	\$ -	\$ -			

UBC Capital Projects Completed since January 1, 2010

As of February 15, 2019

Dollar figures are all in \$000's

Project Name	Faculty / Dept	Completion	Gross Building Area	Capital Cost
Projects completed since January 2010 (for historical context):				
UBC Renew Phase 1 - Old Auditorium	Arts	APR-10	32,734	\$20,141
UBC Renew Phase 1 - Buchanan A	Arts	JUN-10	30,753	\$12,147
T-bird Stadium Turf Field and Grass Rugby Fields	Athletics	AUG-10	N/A	\$2,661
UBCO Student Housing Phase 3B	SHHS	AUG-10	42,618	\$8,120
UBCO Arts & Science Building 2	Arts & Science	SEP-10	86,225	\$41,543
School of Population & Public Health	Medicine	SEPT-10	30,000	\$7,819
UBC Renew Phase 2A BioSciences West & South	Science	MAR-11	151,669	\$61,900
UBCO Reichwald Health Sciences Centre	Medicine	APR-11	48,158	\$30,650
Tennis Facility	Athletics	JUN-11	71,000	\$9,345
UBCO Engineering Management Building	Applied Science	AUG-11	180,532	\$69,611
Norman B. Keevil Institute of Mining Engineering	Applied Science	AUG-11	10,312	\$4,027
Totem In-Fill Student Housing Project	SHHS	AUG-11	181,706	\$38,255
Wayne & William White Engineering Design Centre	Applied Science	AUG-11	20,148	\$8,326
Centre for Integrated Research in Sustainability (CIRS)	VP Research	AUG-11	58,373	\$36,781
Childcare Expansion - Phase 1	SHHS	SEP-10/SEP-11	17,388	\$3,543
Faculty of Law - Allard Hall	Law	SEP-11	141,345	\$55,901
UBCO Student Housing Phase 4	SHHS	SEP-11	68,213	\$14,058
UBCO Geoexchange Phase 3	UBCO	OCT-11	N/A	\$6,494
Centre for Comparative Medicine	VP Research	NOV-11	75,933	\$37,030
Sauder School of Business Building Project	Sauder	JAN-12	265,820	\$69,934
UBCO Fitness / Wellness Centre	UBCO Athletics	JAN-13	8,500	\$4,060
Bioenergy Research & Demonstration Project	Energy & Water Services	JUL-12	19,773	\$27,400
Earth Science Building (ESB)	Science	AUG-12	164,020	\$74,700
Pharmaceutical Sciences/CDRD + Modified Barrier Facility & University Data Centre	PharmSci	SEP-12	246,182	\$150,903
Gerald McGavin UBC Rugby Centre	Athletics	JAN-13	5,150	\$2,500
Leon & Thea Koerner University Centre	Peter Wall/SHHS	SEP-13	38,000	\$6,038
Ponderosa Commons (Phase 1)	SHHS	SEP-NOV-13	298,731	\$87,655
Djavad Mowafaghian Centre for Brain Health	Medicine/ Vancouver Coastal Health	NOV-13	152,558	\$69,757
Bookstore Renovation & Expansion	Bookstore	AUG-14	8,800	\$6,608
Robert H. Lee Alumni Centre	Alumni Assoc	APR-15	41,700	\$19,478
New Student Union Building	AMS	MAY-15	253,750	\$108,760
Library PARC	Library	SEP-15	24,540	\$11,140
Engineering Student Centre	EUS	SEP-15	10,058	\$5,740
Dairy Education & Research Centre - Researcher Housing (Agassiz)	Land + Food Systems	SEP-15	11,600	\$3,500
Bentley Family Dining Hall at Loon Lake	Forestry	SEP-15	6,315	\$3,000
Baseball Training Facility	Athletics	SEP-15	20,000	\$3,861
Iona Building Acquisition - Vancouver School of Economics	Arts	DEC-15	99,663	\$33,500
Ponderosa Commons (Phase 2)	SHHS	JUN-16	288,903	\$77,829
UBC Vancouver District Energy System	Energy + Water Services	JUN-16	N/A	\$88,300
Orchard Commons, Mixed-Use Student Housing	SHHS/Vantage College	SEP-16	448,686	\$131,274
Aquatic Centre	Athletics	DEC-16	74,448	\$39,900
Henry Angus Tower Seismic Upgrade	Sauder	JAN-17	0	\$4,162
Quantum Matter Institute	Science/Applied Science	APR-17	51,882	\$30,269
National Soccer Development Centre	Athletics	JUN-17	30,000	\$27,244
MOA Northwest Coast Masterworks Gallery	Arts	JUN-17	2,700	\$4,100
Indian Residential Schools History & Dialogue Centre	First Nations House of Learning	JUN-17	6,523	\$5,500
Brock Commons Phase 1 - Tall Wood Student Residence	SHHS	JUL-17	162,750	\$51,525
Totem Park Residence In-Fill Phase 2	SHHS	JUL-17	99,951	\$30,200
Sports Medicine	Medicine	09-Jul	21,173	\$11,425
Total Completed Projects				\$1,658,613