



<b>SUBJECT</b>	<b>GRADUATE RESEARCH COMMONS/KOERNER LIBRARY INTER-RELATED PROJECTS</b>
<b>MEETING DATE</b>	<b>OCTOBER 2018</b>

Forwarded on the Recommendation of the President

**APPROVED FOR  
SUBMISSION**

Santa J. Ono, President and Vice-Chancellor

<b>DECISION REQUESTED</b>	<b>IT IS HEREBY REQUESTED that <i>approval be granted for:</i></b>	
	<p><i>i. BOARD 1, 2 &amp; 3 for Graduate Research Commons/Koerner Library Inter-related Projects, with a funding release of \$2,403,935 to undertake and complete construction.</i></p> <p><i>ii. An internal loan of up to \$6,209,000 at 5.75% annual interest, to be repaid over 15 years from the Central operating budget.</i></p>	
	Capital Budget	\$6,706,935
	Operating Budget	See report
	Schedule	
	<b>Funding Release</b>	<b>\$2,403,935</b>
	<b>Information</b>	
	Expenses to date	\$467,842
	Funding released to date	\$4,303,000

<b>Report Date</b>	October 12, 2018
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**Presented By** Andrew Szeri, Provost and Vice-President Academic  
 Peter Smailes, Vice-President Finance & Operations  
 Susan Parker, University Librarian  
 John Metras, Associate Vice-President Facilities  
 Jennifer Sanguinetti, Acting Managing Director, Infrastructure Development

**EXECUTIVE SUMMARY**

Executive approval to proceed with a series of inter-related renovations in the Walter C. Koerner Library was originally given in January 2017 and updated in October 2018. The primary renovations on levels 4 and 5 will create a much-needed Graduate Research Commons for the University, including a centre for digital scholarship. Additional renovations on level 2 will streamline operations for some Library functions and provide space for units from the Vice-President Academic (VPA) office. Renovations on level 6 will improve the functionality of the Vice-President Finance & Operations offices. While these renovation projects are not operationally connected, they were grouped together for execution to ensure proper coordination and minimize cost.

The projects have all completed their design phases, the 2nd and 6th levels have progressed through construction either in whole or in part but the 4th and 5th levels have received tender prices that are significantly in excess of the originally approved budget.

Due to this overage plus smaller overages on some of the other levels, the project requires additional funding and additional approval to proceed with the last phases of construction through completion. The value of the overall package of projects now exceeds the \$5 million Board approval threshold and therefore a combined Board 1, 2 and 3 approval is requested.

The overages are due primarily to two factors: 1) A significant scope change to accelerate the development of the centre for digital scholarship and allow for the future use of one quadrant of the 5th level for research administrative uses, and 2) construction market cost escalation which has been higher than expected since the project was originally approved in early 2017. The administrative uses that are intended to go into the 5<sup>th</sup> level quadrant are the offices of the Vice-President, Research and Innovation (VPRI). With the decision to allocate space for the future VPRI offices, it was necessary to advance the development of the centre for digital scholarship which had originally been intended as a phase 2 component to be developed at a later date. The centre is more expensive per unit area to build than the original open study area that was planned in the original project scope, resulting in a significant cost increase. The benefits of this centre are significant though – UBC is one of very few leading universities not to have one. Additionally, the co-location of the VPRI offices with the Graduate Research Commons should result in synergies and help create a positive and supportive environment for graduate students. Finally, the Library has calculated that even with the conversion of one quadrant of the 5<sup>th</sup> level to administrative use, the overall project will result in a net gain of 80 study seats (increasing from 96 pre-renovation to 216 post-renovation).

All parts of the project have conducted extensive value engineering (VE) exercises to find cost savings.

The project areas and statuses are as follows:

- **Level 4/5 Book Relocation;**  
Update: Complete, on budget.
- **Level 4/5 Graduate Research Commons;**  
Update: Demolition/Shelf removal underway. Balance of works at point of tender, additional funding required to award tender. Target completion April 2019.
- **Level 2 South VPA Office Renovation ;**  
Update: Construction start October 2018. Currently on budget. Target completion December 2018.
- **Level 2 North Library Office Renovation;**  
Update: Construction completion October 2018. Additional funding required to complete.
- **Level 6 VPFO Office Renovation**  
Update: Construction underway; additional funding required to complete. Target completion December 2018.

The total budget for the completion of the Koerner Library inter-related projects on Levels 6, 4, 5 and 2 is \$6.707 million. A cost breakdown for the projects is provided in this report, and a detail of the factors for the budget overage is shown in Attachment 1 of this report. The project is to be financed with a Central Internal Loan, serviced from the central operating budget together with \$398k of previously committed donor funding and a \$100k contribution from Copyright Services.



This Digital Scholarship venue will have experts available for consultation who will also give workshops and bring other experts into the space for teaching and training on tools and other software. Another feature of this space is a technology-enhanced dissertation and thesis defense room. This room can help students create as well as present their multi-media or multi-modal scholarship and can support virtual participation by readers or panelists who are on committees but who are located elsewhere geographically. A further benefit of this richly-enhanced space will be the capacity for VPRI and other units, including the Faculties, to demonstrate for visitors the cutting-edge work of students and faculty members, in cutting-edge facilities. The Library will bring in collaborators from all parts of campus to share knowledge and demonstrate techniques.

It is important to note that even with the conversion of the Level 5 South quadrant to VPRI usage, there will still be a net increase of study spaces from 96 to 216 post-renovation.

*Levels 2 and 6:*

In tandem with these academic requirements and renovations, two administrative groups now housed on Koerner Library Level 6, Office of VP Academic & Provost (VPA) and Office of VP Finance & Operations (VPFO), both require renovations to accommodate change within their working groups. The VPA Office's two reporting groups, Strategy & Decision Support (SDS) and Planning and Institutional Reporting (PAIR), require co-location near the VPA Office to better facilitate ongoing project collaboration with the VPA. These two groups will move to renovated Koerner Level 2 space vacated by Library moves to consolidated space on Level 2 and Levels 4 and 5. SDS were previously located on level 6 and PAIR in the Old Administration Building. The existing VPFO Office will be renovated to better accommodate the needs of the Finance team and the nature of the work in this office. The existing Level 6 VPFO Offices will be renovated.

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**BENEFITS**  
Learning,  
Research,  
Financial,  
Sustainability &  
Reputational

There are several benefits to all of the parts of this project as follows:

**Academic Need**

- The designed spaces on levels 2, 4 and 5 will signal UBC’s commitment to supporting graduate student and postdoctoral education and collaboration as well as create a shared space for the Library and its campus partners to deliver new and expanded services for these groups.
- The new Graduate Research Commons on Levels 4 and 5 of the Koerner Library will act as a hub and entry point for the many services UBC Library provides to all scholars in support of creating and publishing in a digital environment, moving scholarship and knowledge forward in all its forms. It will provide access to space and technology to collaborate, share, and access expert assistance in creating flexible learning resources that can be used to further UBC’s transformation around teaching and learning. Digital scholars will also find space, technology and services to enable their work including GIS, data visualization, text analysis software and librarian experts in digital scholarship tools and technology.
- The originally-approved renovations to Level 4/5 considered development of the Graduate Research Commons in two phases. The first phase, occupying 3 of the 4 floor plan quadrants on levels 4/5, considered a future Phase 2 development of the Digital Scholarship lab and bookable technology spaces to support flexible learning, as well as other services and spaces not presently offered to students at Koerner Library. By re-shaping the project to include the Phase 2 scope, the offering to students is a conversion of book storage to highly visible, high quality destination learning spaces, including the Phase 2 technology-rich spaces that are now geared to support digital scholarship in multiple fields, as well as trans-disciplinary work.
- The original project scope would have left Level 4 South as a study swing space. By mobilizing now on all of Level 4 and 5 with renovations, the overall floor space at Koerner library will be more efficiently utilized.

**Administrative need**

- By condensing the library program, space is created for a future renovation of Level 5 South for use as VPRI office space, not only recognizing the importance of co-location in proximity to other members of the executive team but also recognizing the importance of co-location of the VPRI offices near the Graduate Research Commons.

**RISKS**  
Financial,  
Operational &  
Reputational

Risks originally identified in the project have materialized, and are contributing factors to project budget overages. Risks include:

- Schedule impact: Inter-related projects that depended on a sequenced start have been delayed in part due to a desire to synchronize project delivery. Deployment with a single Construction Manager is part of a strategy to recover schedule wherever possible. Delays due to funding challenges have also materialized.

- Market escalation: Recent market escalation has impacted all four project areas. Scope reduction has been implemented to contain costs on all four project areas to mitigate impacts of escalation.
- Scope change: The considerable change in scope from the originally-envisioned, two phase Level 4 /5 Graduate Research Commons areas to the current, single phase re-development underway has had a dramatic impact on project costs. Delays due to re-design were minimal due to the fast action of both the user group and the consultant team. Costs are primarily due to the change in nature from open study areas, to technology-rich areas in an enclosed floor plan concept.

**COSTS**  
Capital & Lifecycle Operating

**Capital Costs**  
The following revised capital budgets were prepared by UBC Project Services (Infrastructure Development) based on tender price results for all four project areas. The budget includes design, construction, furnishing, AV/IT and project management costs required to deliver the full project to completion.

Component	Budget January 2017	Revised Budget October 2018	Variance
Level 4/5 Graduate Research Commons Phase 1	\$1,995,000	\$ 4,490,935	<b>-\$1,929,935</b>
Level 5 South Graduate Research Commons Quiet Study Phase 1	\$566,000	Incl above	Incl above
Level 4/5 Book Removal	\$ 700,000	\$ 700,000	\$ 0
Level 2 North Koerner Library Offices Relocation	\$200,000	\$ 400,000	<b>- \$ 200,000</b>
Level 2 South VP Academic & Provost Office Relocation	\$416,000	\$ 416,000	0
Level 6 South: VP Finance & Operations Renovations	\$426,000	\$ 700,000	<b>-\$ 274,000</b>
<b>Total Project Costs</b>	<b>\$4,303,000</b>	<b>\$ 6,706,935</b>	<b>-\$2,403,935</b>

The full breakdown of the total budget is as follows, noting that the design and escalation contingency line items have been zeroed out due to the stage of the project:

CAPITAL BUDGET		
Component	Total \$	\$/gsf
Construction	\$ 2,942,392	
General Conditions	\$ 182,922	
Construction Management Fee	\$ 42,075	
Construction Contingency	\$ 283,500	
<b>Total Construction</b>	<b>\$ 3,450,889</b>	<b>181</b>
FF+E	\$ 816,900	
UBC IT + AV Equipment Allowance	\$ 510,000	
Project Commissioning	\$ 68,500	
Fire, Safety & Security	\$ 19,200	

Building Operations	\$ 30,000	
Design Contingency (0%)	\$ 0	
Escalation Contingency (0%)	\$ 0	
<b>Total Cash Allowances</b>	<b>\$ 1,444,600</b>	<b>76</b>
Design Consultants	\$ 530,160	
Project Management	\$ 334,700	
Permits - BP/IIC	\$ 22,951	
Insurance/Legal	\$ 5,800	
Commissioning Insp + Testing	\$ 18,000	
<b>Total Soft Costs</b>	<b>\$ 911,611</b>	<b>48</b>
<b>Project Subtotal</b>	<b>\$ 5,807,100</b>	<b>305</b>
Tax	\$140,700	
Construction Period Financing	Included above	
Retained Risk Fee	\$59,200	
Level 4/5 Book relocation	\$700,000	
<b>PROJECT TOTAL</b>	<b>\$6,707,000</b>	<b>352</b>
<i>Gross Area (ft<sup>2</sup>)</i>	<i>19,041</i>	

### Operating Budget

There is no change to the occupied footprint of the projects so there will be no change in the annual space chargeback amount.

### FINANCIAL Funding Sources, Impact on Liquidity

The funding breakdown by individual phase is outlined in the table that follows. Sutherland Foundation funding for \$398,000 and Copyright Services funding for \$100,000 have already been received. Remaining funding will be advanced in the form of an internal loan to Central for \$6,209,000. The loan will have a term of 15 years with a 5.75% annually rate of interest. The debt service will be \$612,905 annually. Treasury has assured that liquidity is available for this project and the operating debt burden impact will be 0.031% assuming 2018 revenue carries over the term of the loan.

Anticipated Funding Sources	Budget January 2017	Revised Budget October 2018 B	Variance
	A	B	B-A
KOERNER GRADUATE RESEARCH COMMONS – Phase 1			
Sutherland Foundation funding obtained	\$398,000	\$398,000	
Copyright Services funding obtained	\$100,000	\$100,000	
Central Funding	\$1,497,000	\$3,426,935	<b>+\$1,929,935</b>
KOERNER GRADUATE RESEARCH COMMONS QUIET STUDY			
Central Funding	\$566,000	\$566,000	0
KOERNER LIBRARY Book Removal			
Central Funding	\$700,000	\$ 700,000	0

KOERNER LIBRARY OFFICE RELOCATIONS			
Central Funding	\$ 200,000	\$ 400,000	<b>+ \$ 200,000</b>
VPA & PROVOST'S OFFICE RELOCATIONS			
Central Funding	\$ 416,000	\$ 416,000	
VP FINANCE & OPERATIONS RENOVATIONS			
Central Funding	\$ 426,000	\$ 700,000	<b>+\$ 274,000</b>
<b>Total Funding Requested</b>	<b>\$4,303,000</b>	<b>\$ 6,706,935</b>	<b>+\$2,403,935</b>

**SCHEDULE**  
Implementation  
Timeline

**Schedule Updates**

- Level 2 South [VPA-Provost offices relocation] has been tied to construction completion of the Level 2 Library staff relocation. Construction start October 2018.
- Level 4/5 Construction start was tied to completion of the decanting of the books in the existing stacks. This book removal was completed in July 2018. Construction start for Level 4/5 is dependent on confirmation of funding for tender award.

The updated project schedules are outlined below.

<b>Milestone</b>	<b>Date</b>
Executive 1 (completed)	June 2014
Executive 2 (completed)	November 2016
Executive 3 (completed)	January 2017
Executive 3 UPDATE (completed)	October 2018
Board 1, 2 & 3 Approval	October 2018
Construction Start (L2 Library Offices Relocation)	May 2018
Construction Completion (Library Offices)	October 2018
Occupancy (Library Offices Relocation)	October 2018
Construction Start (VPA & Provost)	October 2018
Construction Completion (VPA & Provost)	December 2018
Occupancy (VPA & Provost)	December 2018
Construction Start (VPFO Office)	August 2018
Construction Completion (VPFO Office)	November 2018
Occupancy (VPFO Office)	December 2018
Demolition & Shelf Removal (Level 4/5)	September 2018
Construction Start (Level 4/5)	October 2018
Construction Completion (Level 4/5)	March 2019
Occupancy	April 2019
Board 4	April 2021

**CONSULTATION**

Relevant Units,  
Internal & External  
Constituencies

Extensive consultation was held in the development of the program with faculty and staff from the relevant departments and faculties, including the Library, the Faculty of Graduate and Post-doctoral Studies, Representatives from the Graduate Student Society, the VPFO, the VPA and the VPRI. A feasibility study was undertaken in 2015 for the Level 4/5 program that included participants from a wide variety of stakeholder groups. A graduate student representative continued to provide feedback through their membership on the project working committee

Campus and Community Planning have granted all applicable Building Permits.

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**Attachment 1: Summary of Budget Overages**

The projected budget overage may be attributed to the following primary factors:

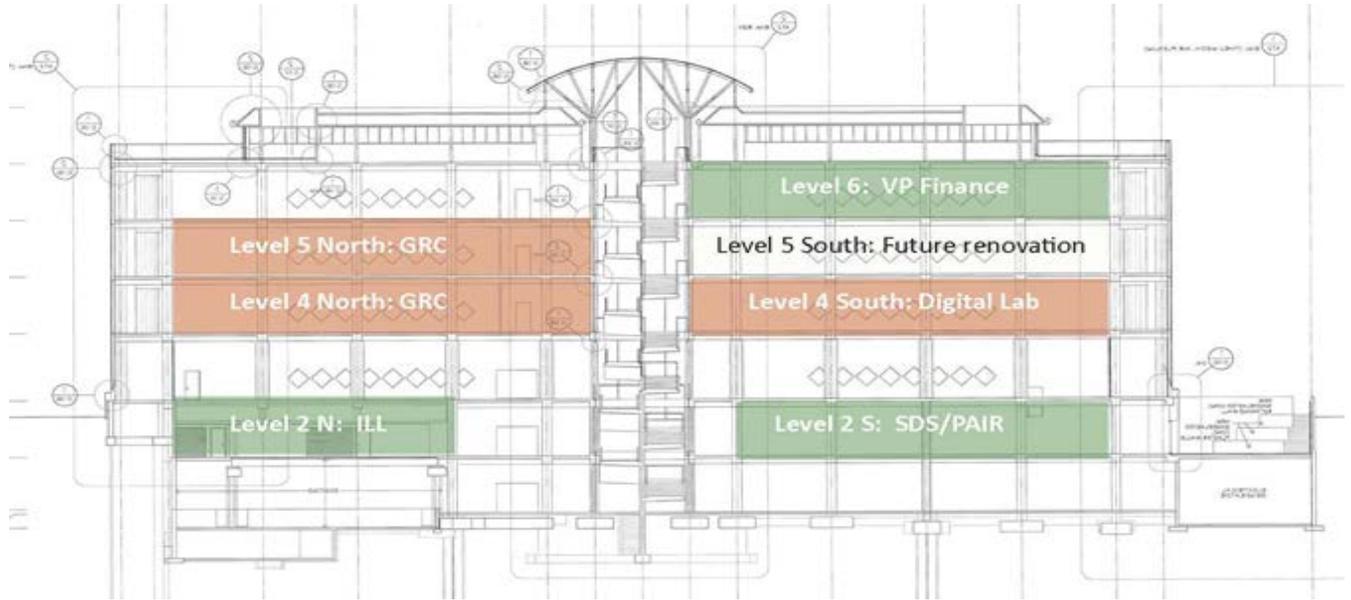
1. Scope changes to the project.
2. Market escalation impacting trade values.
3. Delays in tender award from originally projected project timeframe.

[Dollar values updated using tender results. Costs are net of value engineering (VE efforts).]

Issue area contributing to project cost overage:					Approximate Net Value of overage relative to Budget
	Level 2 ILL	Level 2 SDS/PAIR	Level 6 VP Finance	Level 4/5 GRC	Total
<p><b>1. Market escalation:</b> Original budget should have included an allowance for typical year-year escalation of 3% per annum. Project budgets from 2014-2017 typically allowed for 3-4% escalation p.a. Recent market escalation has spiked, from 7% p.a. in 2017, to approx. 1% per month in last 6 months. This recent escalation accounts for a significant price increase alone, and accounts for a majority of the price increase across all trade costs. Unforeseen amount approx. 10% of overall construction costs.</p>	\$14k- <i>offset by project VE</i>	\$14k- <i>offset by project VE</i>	\$21k	\$ 132 k	\$ 190 k [10% of original construction value of \$1.9M]
<p><b>2. Schedule duration:</b> Increase in schedule over original timeframe added consulting costs, CM pre-construction costs</p>	-	-	-	\$ 110k	\$ 110 k
<p><b>3. Issues with original Level 2, 6 Budget for Construction:</b> The original budget forecasted that the Level 2 ILL renovations could be completed for a figure equivalent to half the cost intensity of the Level 2 South work. This resulted in a design stage request to bring the budget figure up to a comparable level as the other Level 2 renovation. Scope reductions for Level 2 ILL were done to keep the figure as low as possible.</p>	\$200k	-	-	-	\$ 200 k

<p><b>4. Level 6 VP Finance</b> – Construction costs very high relative to budget. E.g. The budget did not forecast the magnitude of mechanical / electrical costs that would be triggered by creating the enclosed office areas. [\$150k M/E tender costs, VS original <u>total</u> construction budget of \$208k]</p>		-	\$200k	-	\$ 200 k
<p><b>5. Scope change to Level 4/5 renovation:</b> The re-planning of Level 5 South has introduced significant impacts to amount of wall areas, enclosed room, data and power infrastructure furniture, etc., over the open quiet study area originally envisaged. Changes to the WC layout were not part of original scope, now required due to re-planning of floor levels 4/5.</p>	-	-	-	\$ 1,000 k	\$ 1,000 k
<p><b>6. Associated Increased A/V, IT requirements:</b> Budget did not foresee the extent of A/V, IT installation primarily in the areas for the Digital Humanities lab now to be included in Level 4/5 scope; projected to be \$230k over budget estimates</p>	-	\$15k - <i>offset by project VE</i>	\$25k- <i>includes savings from project VE</i>	\$182k	\$230k
<p><b>7. Furniture costs:</b> Scope changes to level 4/5 have contributed to higher costs than originally budgeted [in terms of furniture types to be specified], market costs are also a driver for high furniture costs relative to budgeted amounts.</p>	-	-	-	\$234k	\$ 234k
<p><b>8. Associated design / consulting costs:</b> Level 4/5 planning changes at a late design stage triggered consulting costs, extended project duration, and the planning changes have been implemented.</p>	-	-	-	\$ 110 k	\$ 110k
<p><b>9. Retained Risk:</b> This calculation should have been included in original budget estimate, now required as projects are above \$2.5M threshold.</p>	\$ 4k- <i>offset by project VE</i>	\$ 4k- <i>offset by project VE</i>	\$ 7k	\$50k	\$ 66 k
<p><b>10. Commensurate increases in associated UBC costs:</b> Overall costs result in increase to PM fees, insurance, permits</p>	\$14k - <i>offset by project VE</i>	\$14k- <i>offset by project VE</i>	\$16k	\$116k	\$ 160 k
<p><b>Total variance from original budget</b></p>	\$ 200k	-	\$ 274k	\$1,930	<b>\$2,404k</b> <i>[Net of VE savings]</i>

**Attachment 2: Section Showing Locations of Inter-Related Projects**



*Diagram showing inter-related projects for Koerner Library, looking east*

Date: October 19, 2018  
To: Members of the Board of Governors  
cc: Susan Parker, University Librarian; Anne Olsen, Head, Koerner Library; Gail Murphy, Vice-President, Research and Innovation  
From: Andrew Szeri, Provost and Vice-President, Academic  
**RE: Renovations to Koerner Library**

Significant investments are currently being made in the Walter C. Koerner Library after the university identified a campus need for dedicated learning and collaboration spaces for graduate students, faculty and postdoctoral fellows. I understand that some Governors may have observed the start of renovations and have questions about what is happening.

Renovations on the fourth and fifth floors, which began in September 2018, will see the creation of additional study space on these levels as well as a modern and expanded [Research Commons](#) for students. The result will be a high-quality, technologically-enhanced, visible and interdisciplinary space to deliver services focused on graduate students and postdoctoral fellows. The vision is to bring together academic programs and services from across campus in support of graduate student success, including collaborations with the Library for programming with Graduate Pathways to Success, graduate career services (with the Centre for Student Involvement & Careers), and offerings from the Postdoctoral Fellows Office.

Some of the key features of the Research Commons include consolidated and improved access to services that articulate the Library's growing role in supporting digital scholarship, such as copyright advising services, the UBC digital repository (cIRcle) and support for the dissemination of research; graduate writing support; open publishing; and research data research. Research consultation and personalized access to librarian expertise will also be available.

The Research Commons will include a thesis defense/multipurpose room with videoconferencing capabilities; flexible presentation space for events; consultation and collaboration room; and a variety of presentation spaces for the delivery of digital scholarship, for training and for programs and other information.

In addition to the need for more technology-rich, inviting spaces on campus, enhancing support of UBC's research agenda was recently identified as a core need during the university's strategic planning process. This requires additional space, which is my responsibility to locate.

After exploring a number of different options and consulting with the President, I have chosen to accommodate the expansion of the office of the [Vice-President Research & Innovation](#) (VPRI) on part of the fifth floor of Koerner Library. The new layout of floors 4 and 5 represents a change from the original vision that graduate students were consulted on. That plan saw three-quarters of the space allocated to the Research Commons and the remaining quarter to be developed – after fundraising – to address digital infrastructure needs.

Changing this plan was a difficult decision and has been met with some dissatisfaction from graduate students, who are concerned about the lack of contiguous graduate library space, as well as the redirection of part of Koerner Library for administration purposes.

It's important to note that although VPRI will now occupy the fourth quarter of the project on floors 4 and 5, I have worked with key stakeholders in the library to find the equivalent lost footprint within the building. Digital infrastructure will be accommodated sooner into the remainder of the project on floors 4 and 5, while the planned Emerging Media Lab Virtual Reality Studio will be incorporated into the Irving K. Barber Learning Centre. In addition, the graduate study seats which would have been added in the renovation will now be incorporated into a graduate study room on level 2 after some small renovations in that area are complete.

These developments on floors 4 and 5 have led to a number of temporary changes for students, staff and faculty. The renovations have required the relocation of some low-use materials from Koerner Library levels 1, 2, 4 and 5 to the [Library Preservation and Archives](#) (Library PARC) facility, located on UBC Vancouver's south campus. By moving low-circulation items from the library's collections to PARC, physical space can be freed up for other uses, including housing high-circulation collections and the creation of student learning spaces and research services. It is important to note that all material in Library PARC will continue to be fully accessible to researchers (including students) through the library's catalogue and request system.

Other impacts of the renovation work include the relocation of student study carrels and the relocation to temporary workspaces for Koerner Library librarians and staff. At the same time, the Office of VP Finance & Operations (VPFO) and the decision support units from the VP Academic portfolio are also undergoing renovations independent of those on floors 4 and 5, and staff members have been moved to temporary workspaces.

The Koerner Library renovations project is expected to be completed in early 2019. Our commitment to the graduate Research Commons remains strong, and I meet with key Koerner Library stakeholders to discuss the library and its future development. I am committed to ensuring that all students and faculty have the tools they need for success, and that the Library and the Office of the VPRI are key partners in promoting that success.