HERITAGE IS LIVING HERITAGE IS LIVING HERITAGE IS LIVING

DATE: APR 02, 2024

Heritage is Worth the Investment

UBC RENEW | BUCHANAN BUILDING

Originally built in 1960 as a multi-purpose classroom, Buchanan Building D was renovated under the University of British Columbia's (UBC) Renew Program, a partnership between UBC and the provincial and federal government. The program provided 120 million dollars to upgrade the UBC campus and gave 12 buildings 40 more years of life for just over half of the cost of building new. The key goals of UBC Renew were to preserve heritage buildings, mitigate deferred maintenance debt, minimize environmental impact and to save money.

Before initiating the restoration, UBC commissioned the architecture firm Busby Perkins & Will, and Altus Helyar Group to complete a life cycle assessment and salvage-value cost-estimate study. The project included the design objectives to provide public space and a connection to the outdoors, provide a healthy working environment, provide ease of operation, limit ecological footprint, and to create a life-cycle analysis (LCA) as a basis for design decisions. The analysis resulted in the decision to retain the Buchanan building and adapt it to future needs as well as create a business case for maintaining, re-using and adapting other buildings on the UBC campus.

The study of the Buchanan buildings set the groundwork for the future UBC Renew Phases by helping the University to fully understand the magnitude and scope of up-and downstream



BUCHANAN COURTYARD | PHOTO CREDIT: UBC

The savings on each building restored meant that the restoration of every third building was free when compared to the cost of building new.



environmental and financial implications of renovating versus constructing a new building. The decision to restore rather than to build new ultimately resulted in the restoration of the existing buildings in over a third less time than new construction, saved on embodied carbon, reduced deferred maintenance costs and saved one third of the construction cost in comparison to building new. Through the structure of the restoration, the savings on each building restored meant that the restoration of every third building was free when compared to the cost of building new.

The Buchanan building and the other buildings restored through the UBC Renew program demonstrated the environmental and financial benefits of restoration as opposed to new construction. The UBC Renew program is a prime example of how heritage conservation can contribute both environmentally and economically. The Buchanan building and the others restored through the program will continue to live and to provide benefits to the staff and students of UBC.

By Angus Affleck

SOURCES

Suzanne Poohkay, UBC infrastructure Development National Trust Conference, October 22, 2016 <u>Slide 1 (nationaltrustcanada.ca)</u>

Buchanan Building, University of British Columbia: <u>UBC Facilities, Vancouver</u>

Life Cycle Building Challenge - Busby Perkins+Will Architects Altus Heylar Group University of British Columbia, 2008 <u>LCA poster 20080918 FINAL.pdf (nationaltrustcanada.ca)</u>