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LIFE CYCLE COST (LCC) OF UNIVERSITY BUILDING MAINTENANCE: A SYSTEMATISED REVIEW (2025) *Planning Malaysia*, 23 (1), pp. 501-520.

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Abstract

An effective maintenance management is predominantly important for university building, but commentators advocated it is more important for the maintenance strategies to be designed based on the efficient use of capital and resources. Commentators pointed out there has been a critical demand to improve the traditional building maintenance policy that based on annual budget availability to prevent unforeseen restriction that can hinder a comprehensive implementation of building maintenance works. To overcome this, the life cycle cost (LCC) economic assessment technique has been recommended as an ideal solution that can facilitate the university agencies in the decision making to determine the most optimum building maintenance cost and financial capability over the anticipated study life. However, there is a need to identify any establishment link between the LCC with university building maintenance. Therefore, this paper is prepared with the objective to present the outcome of systematised review on life cycle cost (LCC) with specific reference to university building maintenance. A comprehensive review was conducted by searching databases, titles and abstracts screen, full-text analysis and data extraction on the targeted articles that have discussed the university building maintenance or indicated any form of building maintenance management elements with specific reference to LCC. The articles were identified from Google Scholar, Emerald, SAGE Scopus, My Cite, SpringerLink, as well as other databases. The findings indicate that many studies focused on building maintenance, however, there has been no specified guidelines concentrated on the LCC analysis of university building maintenance, which can be deliberated for practical guidance of maintenance management by the university agencies to attain value for money and making the university buildings and teaching and learning facilities economically wise use over the long term. © 2025 by MIP.

Author Keywords

Life cycle cost; Maintenance; University building

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