

## **A fresh look at pavement life costs**

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### **ABSTRACT**

Whole of life cycle costing of pavements has not been revisited for nearly 27 years since 1990 by the Bureau of Transport Economics (now BITRE). Previously, asphalt was considered to have a lower cost of construction but required regular maintenance (every 5 to 10 years), whereas concrete was presumed to require less maintenance (typically 10 to 20 years) and, consequently, result in lower whole of life costs. However, with significant changes in the costs of bitumen and cement in the ensuing period, techniques of road construction and new pavement materials, the preconceptions of life cycle costs of asphalt and concrete pavements have likely changed considerably. This presentation will report on the findings from a study conducted by Arcadis which compared the life cycle costs of plain concrete pavement (PCP), asphalt over heavily bound (ACH), full depth asphalt (FDA) and full depth asphalt with EME2 (FDEA) across a number of project specific scenarios, ultimately concluding by ranking the best value pavement on the basis of Pavement Cost Index.