

The important role materials play in concrete pavement design, performance and service life

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ABSTRACT

The materials that make up concrete have a direct influence on the decisions made during pavement design, construction and the later performance of the pavement itself in-service.

What happens when we have a variation in the material performance from that considered at design stage? What if we need to construct differently or experience something unexpected during construction?

Are there some simple things we can do to reduce these risks and improve the long-term performance of concrete pavements?

This paper discusses the importance of understanding the properties each constituent material provides to a concrete pavement design and the importance of understanding what to do when something in the system changes. The relationship between design decisions, construction implications, and avoiding costly defects and poor performing assets is discussed.