SERVICE LIVES OF THIN SURFACING SYSTEMS IN THE UK

J. C. Nicholls*
Academy Fellow, TRL Limited (UK)
I. Carswell
Team Leader, TRL Limited (UK)
J. T. Williams
Team Leader, Highways Agency (UK)
M. Gibb
Technical Director, Chris Britton Consultancy (UK)

*TRL Limited, Crowthorne House, Nine Mile Ride, Wokingham, Berkshire
RG40 3GA, United Kingdom, cnicholls@trl.co.uk

ABSTRACT
During the 1990s, various categories of thin surfacing system were introduced into the United Kingdom. Because of their short-term properties, thin asphalt surfacings gained a substantial share of the surface course market in all parts of the UK network. An extensive programme of monitoring involving 132 sites (27 with paver-laid surfacing dressing, 48 with thin asphalt concrete, 48 with thin stone mastic asphalt, 6 with multiple surface dressing and 3 with microsurfacing of which 27 have been resurfaced and 52 are still being monitored) is underway on a range of some early sites. The objective is to review the latest evidence on performance and update the earlier assumptions about the service life for these products. The findings from the monitoring are that thin surfacing systems can routinely be constructed successfully to provide a safe surfacing with adequate skid-resistance, texture and visual condition and that these properties are maintained in service. There is considerable scatter of service lives, but the hot mix asphalts generally have longer service lives than the thinner surface treatments with thin asphalt concrete and thin stone mastic asphalt system types being capable of lasting 15 years. Therefore, the evidence supports the acceptance by the Highways Agency of these systems for use on trunk roads in England.

KEY WORDS: Thin surfacing, durability, performance, monitoring, road sites