

Chipsealing in New Zealand



Background

This book has been compiled by chipsealing experts from four of the stakeholders who operate, maintain and build the roads in New Zealand. They are Transit New Zealand, Local Authorities, Contractors (represented by Roading New Zealand) and Consultants. Many years of experience based on research and backed up by references have contributed to the concentrated work to create this book. It is a distillation of information from at least 80 years experience in New Zealand.

The experiences drawn on to write this book range from the 1920s to 2005, from the time when chipsealing was almost an 'art form' and largely guess work to its present 'technological form'.

Chipsealing techniques differ from the north to the south of New Zealand as our country is long, crossing subtropical to near-subantarctic conditions over its 2000 km length. New Zealand is also narrow, and many of our roads pass quickly from coastal plains to mountainous passes. These extremes of climate and landscape impose many constraints on road surface performance and present challenges to be overcome and also prevents hard and fast rules on chipsealing being established.

As there is therefore no 'correct' or only way for a chipsealing operation to be carried out, experience and research are presented in this book so the reader can make their own informed decisions when using chipsealing technology.

Authors

Authors of the chapters are all experts in their own fields of chipsealing. They have worked on their own and collectively, discussing methods and techniques that have evolved over the years, understanding which ones give the best results, the longest lives, and most economical returns.

Content

This book provides in depth reading through 12 chapters on the topics of history of chipsealing in New Zealand, safety in the industry, the main chipseal surfacings used in New Zealand, their performance, programming, and design. The materials, plant and machinery used for chipsealing are described, as well as how to prepare for and carry out the sealing operation. The final chapter explains how to identify failure modes early before they become a major problem, and how to keep a road alive.

Audience

This book is intended for those studying road engineering at polytechnic or university level and for those already in the chipsealing industry who want to broaden their knowledge, or those from another line of engineering to understand chipsealing in more detail for a particular project.

Purchase

Chipsealing in New Zealand cost NZ\$160 (incl GST and pp) and can be ordered from our online [ordering form](#).