

# 17<sup>th</sup> AAPA Technology Annual Report

## Executive Summary

This report covers the seventeenth year of the AAPA Research and Technology programs.

In 2000/2001, AAPA undertook a major review of its purpose and objectives. The outcomes of the review were a new Three Year Forward Plan (2002–2004) incorporating priorities under what was designated the Black Ribbon Initiative (BRI). The technical agenda was also reviewed as part of this process and was directed at provision of best value products and services by providing:

1. Value in pavements – development of fully substantiated economic arguments favouring the acceptance and use of asphalt and bituminous products and associated member services as the preferred pavement solutions.
2. Supportive performance evidence that elevates client confidence in performance of flexible pavements.
3. Revised, credible life cycle costing methodology.
4. Enhanced pavement performance outcomes through improved quality and consistency of materials.
5. Technical advancement and innovation leading to acceptance of industry preferred technical recommendations, standards, specifications and appropriate innovation.

Implementation of the Black Ribbon initiative was accompanied by a re-vitalisation of the AAPA Marketing Committee. The initial focus of the Marketing Committee has been on two major themes; Major Infrastructure Projects and Local Government. The technology program is aligned to the AAPA Marketing Committee by provision of technical data to support Value in Pavement (VIP) arguments and technical publications for promotion of asphalt and bituminous surfacings as solutions of choice.

A major emphasis in the current technology program has been consolidation of previous program outputs, including implementation into accepted national specifications, design guides and codes of practice and validation of test procedures through correlation with field performance. Close cooperation with Austroads, the various State Road Authorities, ARRB Transport Research and the industry has been a strong feature of the AAPA Technology program since its inception in 1988. An underlying theme of all programs has been to encourage national uniformity of approach to design methods and test procedures and the use of cost-effective, practical solutions. Outputs of the Technology program are seen in a range of publications including Project Reports, Implementation Guides, Advisory Notes and publications produced jointly with Austroads such as various Guides, Work Tips and Technical Notes.

Significant new and revised publications completed in 2004/2005 are listed below. A complete list of publications issued up until September 2005 is provided as an appendix to this document and updated details are available on the AAPA Web Site ([www.aapa.asn.au](http://www.aapa.asn.au)).

New Austroads and joint Austroads/AAPA publications:

- Sprayed Sealing Guide
- Pavement Rehabilitation guide

Revised Austroads and joint Austroads/AAPA publications:

- Pavement Design: A guide to the selection and design of road pavements

New and revised AAPA publications:

- Strategy for Asphalt and Bitumen Bound Products 2004–07
- Asphalt Mix Design – A guide to the process of design and selection of an

asphalt job mix  
Code of practice for manufacture, storage and handling of polymer modified binders  
Asphalt moisture sensitivity (Advisory Note 19).

Enhancing industry skills and expertise in conjunction with training activities, workshops and seminars is an important adjunct to implementation of R&T outcomes and a number of these documents form the basis of existing AAPA training courses.

A major Technology Program review was undertaken in 2005 resulting from a need to revisit the National Technology program to ensure that it reflected the needs of members, particularly at a State level where direct customer focus is an imperative.

To achieve the necessary outcomes, AAPA held a Technical Forum in April 2005 to identify and prioritise National and State technical issues and develop an action plan which provides maximum value to members.

The Technical Forum outcomes also required consideration of future structure and roles of the National and State technical committees.

The high priority National technical issues identified at the Forum were:

- An urgent review of implementation of the Austroads asphalt mix design procedure (APRG 18) covering both mix design procedures and performance testing.
- Promotion of the national specification framework to achieve longer term consistency across Australia and New Zealand
- Development of Stone Mastic Asphalt (SMA)
- Laboratory testing/test methods
- Binders (including polymer modified binders).

The loss of technical expertise across industry and State Road Authorities was also identified as a major issue, together with the process for effective Industry interaction with Austroads.

Following on from the Technical Forum, the AAPA Executive agreed that a new, smaller AAPA Technology Steering Committee be formed. Current actions of the new Committee are focused on developing a technology Program limited to the high priority issues/projects defined at the Technology Forum

The longer term future directions for the AAPA Technology Program will also be reviewed in 2005/2006 as part of the review process for the AAPA Business Plan.