

CREATING A NEW GENERATION OF CONCRETE PAVEMENT

Progress on ACPA's Research Agenda

Progress Through Research and Innovation

Research and innovation have been hallmarks of the concrete pavement industry, beginning in 1893 with the first section of portland cement concrete (PCC) pavement, an 8-foot section of roadway that remains in service in Bellefontaine, Ohio. In the century that followed, research and innovation led to an impressive record of technical advancement as the concrete paving industry helped create the most extensive and efficient transportation system in the world – the U.S. highway network.

Applied Concrete Pavement Research for the 21st Century

As America moves into the 21st century, the challenge is no less daunting. Aging concrete highways have carried far more traffic loads than they were designed to accommodate. Long lasting pavement repair and replacement is now the challenge, complicated by traffic congestion and the continued need for worker safety. New technologies are needed to meet these needs.

Meeting the Needs for Applied Concrete Pavement Research

In the late 1990's significant steps were taken to meet this need. Through the efforts of ACPA, the *Transportation Equity Act for the 21st Century* (TEA-21) included provisions for \$30 million for applied concrete pavement research. The FHWA and the Innovative Pavement Research Foundation (IPRF) entered a cooperative agreement and are aggressively pursuing key research initiatives.

Secondly, ACPA developed a "Blueprint for Research" that outlined five specific goals needed to create the new generation of concrete pavement for the 21st century:

- Discern the best of today's practices.
- Reduce initial costs, without compromising PCC pavement performance.
- Reduce user delays and public inconvenience associated with PCC pavement construction and maintenance.
- Develop cost-competitive PCC options for all paving applications.
- Increase the certainty that PCC pavement will achieve design expectations.

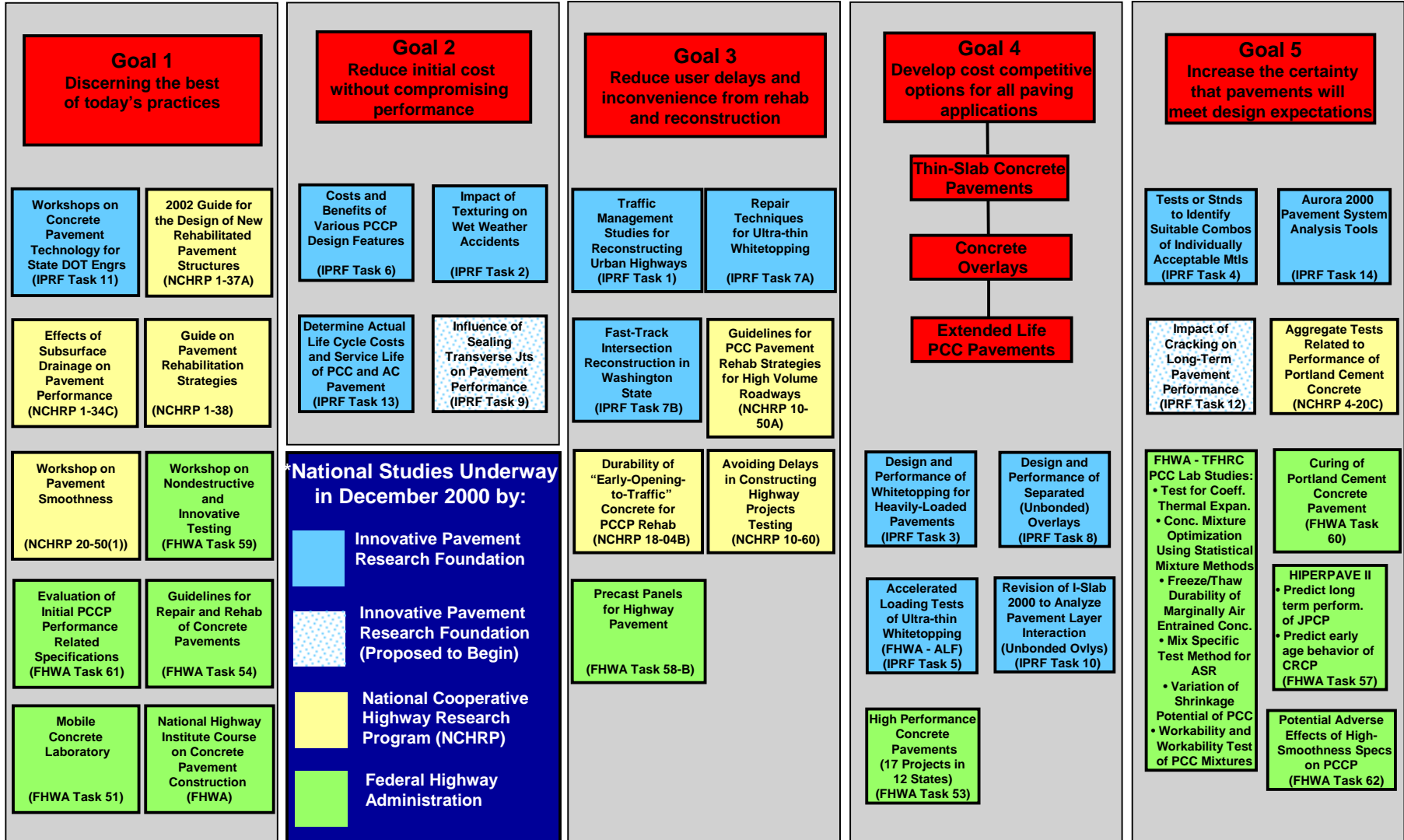
What are We Doing to Meet ACPA's Research Goals?

ACPA is partnering with national and state agencies to achieve our research agenda. At the national level, significant work is underway through the IPRF, FHWA and the National Cooperative Highway Research Program (NCHRP) to help achieve our research goals. This *R&T Update* shows, in chart form, the key research projects currently underway by IPRF, FHWA and NCHRP. Other research and technology initiatives sponsored by state DOTs will also help us achieve our research and technology goals.



Creating a New Generation of Concrete Pavements

Progress on Meeting ACPA's Research Goals*



For More Information

For more information about these projects, visit the IPRF, FHWA and NCHRP websites:

Innovative Pavement Research Foundation: www.iprf.org
Federal Highway Administration: www.fhrc.gov/pavement/pccp/pccp.htm
National Cooperative Highway Research Program: www4.nas.edu/trb/crp.nsf

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