

AIRPORT ASPHALT PAVEMENT TECHNOLOGY PROGRAM



NATIONAL ASPHALT
PAVEMENT ASSOCIATION

Objective

- To re-establish the Airport Asphalt Pavement Technology Program (AAPTP)
- To identify airport pavement issues and problems that could be eligible for funding



3. To coordinate FAA and industry efforts to implement technologies and to solve problems identified through the program as important to FAA and industry
4. To pursue the technology transfer of new solutions, practices, and recommendations as needed

1. Program Coordination Group

- Airport Consultants Council
- NAPA Member
- Aircraft Manufacturer
- Department of Defense
- Federal Aviation Administration
- State Asphalt Pavement Association
- Others



Management

- Project Technical Panel
 - Develop RFPs
 - Select Project Team

- Rubblization
- PG Binder Selection
- Superpave
- SMA
- Longitudinal joints
- Fuel Resistant Binders
- RAP

- Asphalt Mixture Paving Handbook – 2022 Revision
- Guidance on Binder Grade Selection
- Balanced Mix Design: Rutting
- Balanced Mix Design: Cracking
- Mitigation of Delamination and Plastic Flow at Airports
- Improving Performance of Longitudinal Joints in Airfield Asphalt Pavements
- Feasibility of Cold-Central Plant Recycling at Airports

- AC 150/5370-14B - Hot Mix Asphalt Paving Handbook would no longer be supported by FAA
- Last update 2000
- New edition to focus on airfields and highways
- \$200k/18 months
- Three proposals
- Awarded to Asphalt Institute

- Common for consultants to select wrong binder grade for airfield projects
- Project Objective: Develop guidance and a tool to aid in selection of needed binder grade
- \$200k/18 months
- 5 proposals received
- Contract awarded to the National Center for Asphalt Technology

- FAA currently has options for assessing rutting during mix design
- Project objective: Evaluate equivalency of current options and propose new requirements if needed
- \$500k/24 months
- Three teams proposed
- Contract awarded to University of Nevada at

Reno



BMD: Rutting

- FAA currently has no cracking evaluation in specs
- Project objective: Evaluate framework and tests which could be included to assess crack performance during mix design
- \$1 million/36 months
- Five teams proposed
- Contract awarded to University of Illinois at UC

- Project Objectives:
 - Determine best practices for longitudinal joint maintenance
 - Evaluate technologies and methods which could improve joint performance
- \$200k/24 months
- Potential Phase 3: \$100k/12 months
- Four proposals received

- Project Objectives:
 - Determine failure mechanism for high speed exit failures
 - Evaluate technologies and construction methods which could improve joint performance
- \$500k/24 months
- Proposals received
- Project to begin Q2 2022

- RFP closed 2/16/22
- \$500k/36 months
- Phase 1
 - Lab assessment/Pavement structure/Construction Guidance
- Phase 2
 - Construct & monitor performance

- Use of Recycled Materials in Asphalt Mixes
- Superpave Gyration Levels vs. Marshall
- Project Quality Control Reporting Software
- Asphalt Mixture Gradation Bands



Airport Asphalt Pavement
Technology Program

<https://www.asphaltpavement.org/expertise/engineering/airports>



To Join the Mailing List

THANK YOU!

