



AIRPORT ASPHALT PAVEMENT TECHNOLOGY PROGRAM



Objective

- To re-establish the Airport Asphalt Pavement Technology Program (AAPTTP)
- 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



Management

- 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

- 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



Asphalt Mixture Paving Handbook

- 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

- 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

- Feasibility of Cold-Central Plant Recycling at Airports



RFP Currently Out

- Use of Recycled Materials
- Gyrations Levels
- Pavement Interlayers
- Cold Weather Construction
- Intelligent Compaction
- Perpetual Pavement Design



AAPTTP

Airport Asphalt Pavement
Technology Program

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



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THANK YOU!

