Outcomes and What's Coming from the



Airport Asphalt Pavement Technology Program

Objectives

- To re-establish the Airport Asphalt Pavement Technology Program (AAPTP)
- 2. 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



Management

- 1. Program Coordination Group (Identifies Projects to Complete)
 - Airport Consultants Council
 - NAPA Producer Member
 - Aircraft Manufacturer
 - Federal Aviation Administration
 - Department of Defense
 - State Asphalt Pavement Association Representative
 - Aggregate Industry Representative
 - Openings (ASCE APC Member, Airport Council International, American Association of Airport Executives)





Management

- 1. Project Technical Panel (Anyone can serve)
 - Develop request for proposals/qualifications for projects
 - Select project team
 - Monitor project progress



Asphalt Mixture Paving Handbook - Revision

- Objective:
 - Update 2000 Transportation Research Board Publication
 - Will also include building an interactive website for field access
- Principal Investigator: Mark Buncher (Asphalt Institute)
- Project Completion: In layout
- Funding: \$200,000 + \$100,000 for website/app
 - RFP for website development in process



Guidance on Selection of Asphalt Binder Grade

- Objective:
 - Aid engineers on selecting and specifying proper asphalt binder grade for airfields
 - Develop a tool to aid in proper binder grade selection
- Principal Investigator: Raquel Moraes (Auburn University)
- Project Completion: Final
- Funding: \$200,000





Guidance for Selection of Proper Asphalt Binder Grade

Final Report

July 1, 2024 Report No. AIR-002



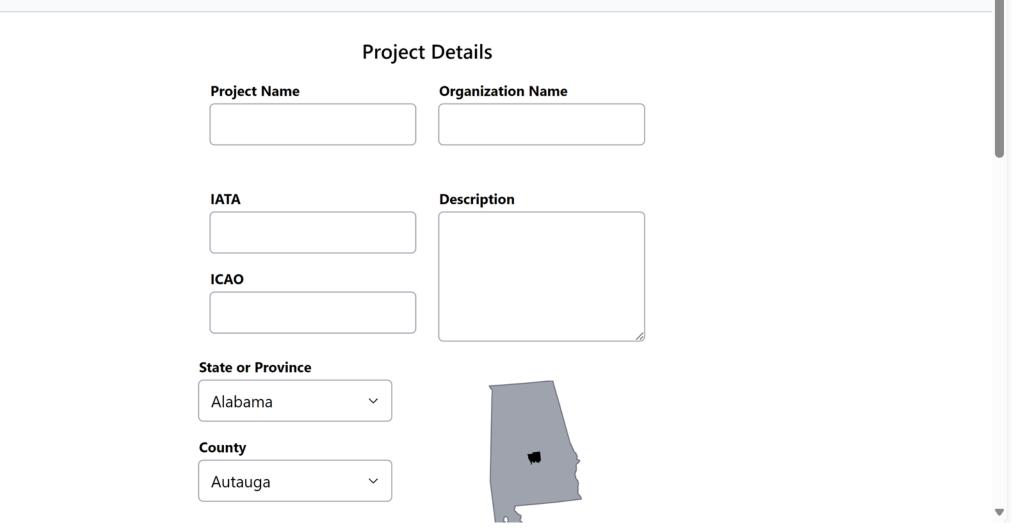


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Airfield Asphalt Binder Selection Tool





Balanced Mix Design: Rutting Tests

- Objective:
 - Harmonize rutting requirements in the current FAA specifications
- Principal Investigator: Elie Hajj (University of Nevada at Reno)
- Project Completion: Final Report in Review
- Funding: \$500,000



Improving Performance of Longitudinal Joints in Airfield Asphalt Pavements

- Objective:
 - Synthesize best practices for maintaining longitudinal joints
 - Evaluate new technologies which could be used to improve joint performance
- Principal Investigator: Randy West (Auburn University)
- Project Completion: In Design
- Funding: \$200,000 + \$100,000 (potential Phase 2)
 - Phase 2 was cancelled because of the lack of field data. PCG is discussing next steps for investigation



Other Ongoing Projects

- Mitigation of Delamination and Plastic Flow at High Speed Exits
- Feasibility of CCPR at Airfields
- Validation of Gyrations for Superpave Gyratory Compactor for Mix Design
- P401 Mixtures: Aggregate Gradation Bands
- Use of RAP in P401 Mixtures
- Airfield Asphalt Pavement Resilience



Asphalt Airfield Video Series

- Objective:
 - Develop a series of videos to pair with paving handbook for technology transfer
- Principal Investigator: Applied Research Associates
- Project Completion: Q2 2025
- Funding: \$500,000



Advanced Technologies

- Objective:
 - Evaluate which new technologies like artificial intelligence and more could be used for the FAA in its airfield work
- Principal Investigator: Continuum Infrastructure Solutions
- Project Completion: December 31, 2025
- Funding: \$200,000



Determining the Environmental Impact of Recycled PFAS-Contaminated Pavement Material

- Objective:
 - Evaluate the impact of pavement recycling on PFAS on airfields
- Principal Investigator: Tim Townsend, University of Florida
- Project Completion: Phase 1: May 2026
- Funding: \$500,000 (Phase 1 \$100,000)



Projects Under Development

- Carbon Reduction Roadmap \$200,000
- Marketing of AAPTP Results \$1,000,000
- Website for Paving Handbook \$100,000



Current State of the Budget

- Total Current Budget: \$15.5 million
- Allocated funds: about \$12.5 million
 - Includes management time and construction of CCPR and RAP test sections at Hughes Center



What Else Should Be Considered?

