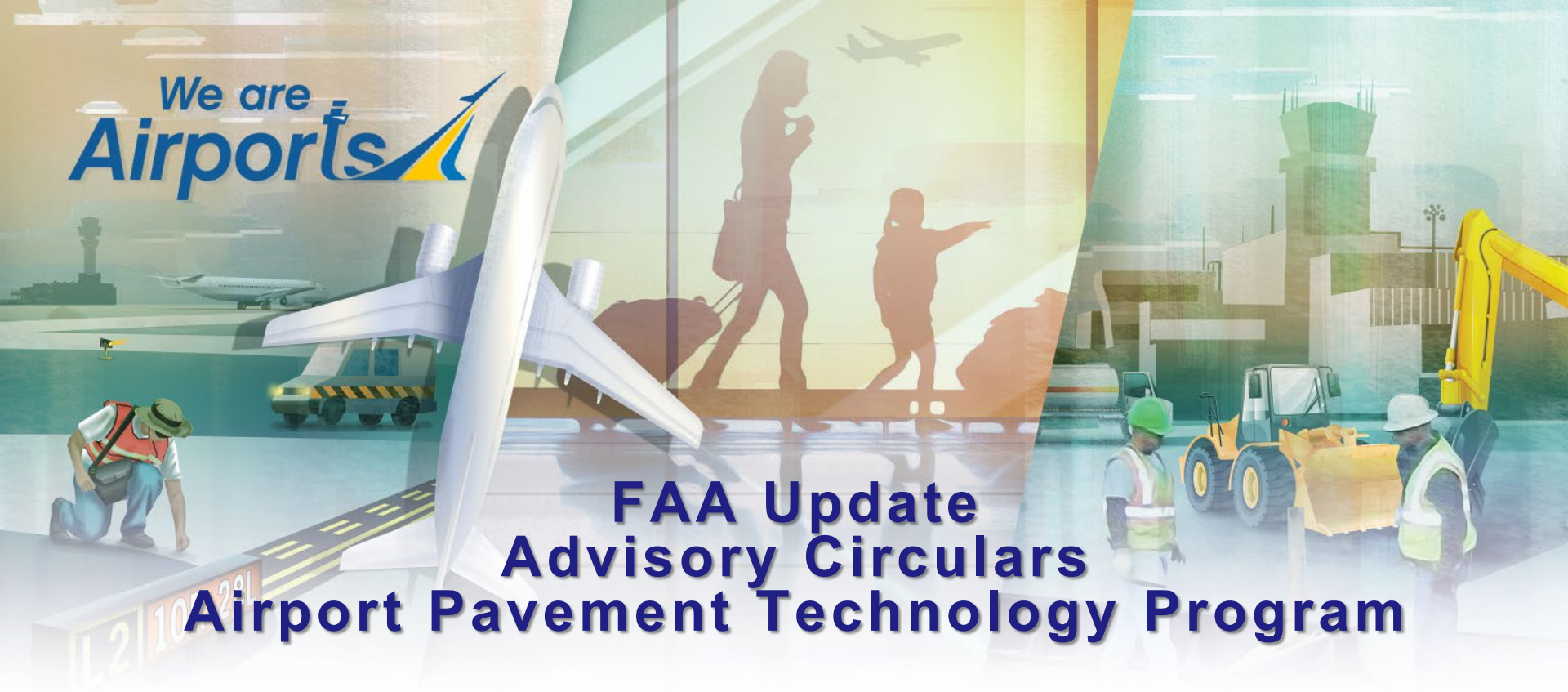


FAA Update
Advisory Circulars
Airport Pavement Technology Program

Airfield Asphalt User/Producer Group

February 22, 2021
Virtual

FAA
Office of Airports

Presentation Objectives

- Pavement Advisory Circular Update
- FAARFIELD 2.0
- Airport Pavement Technology Program

Pavement Advisory Circulars

Advisory Circular	Year	Update	Title
AC 150/5370-10H	2018		Standards for Specifying Construction of Airports
AC 150/5320-6F	**2016**	**21**	**Airport Pavement Design & Evaluation**
AC 150/5335-5C	**2014**	**21**	**Standardized Method of Reporting Airport Pavement Strength (PCN)**
AC 150/5320-5D	2013	21/22	Surface Drainage Design
AC 150/5320-12C	1997	22?	Measurement, Construction & Maintenance of Skid Resistant Airport Pavement Surfaces (incl. Changes 1-8 through 2007)
AC 150/5370-11B	2011		Use of Non Destructive Testing in the Evaluation of Airport Pavements
AC 150/5380-6C	2014		Guidelines & Procedures for Maintenance of Airport Pavements
AC 150/5380-7B	2014	22	Airport Pavement Management Programs (PMP)
AC 150/5380-9	2009	22	Guidelines & Procedures for Measurement of Pavement Roughness
AC 150/5370-12B	2015	21	Quality Management for Federally Funded Airport Construction Projects (Combined 5370-12, 5370-6, 5300-9)
AC 150/5100-13C	**2019**		**Development of State Standards for Nonprimary Airports**
AC 150/5370-14B	**2013**	**Canx**	**Hot Mix Asphalt Paving Handbook**

AC 150/5100-13C Development of State Standards for Nonprimary Airports

- **Released in December 2019**
- **State Standards may be used at nonprimary public-use airports in the state developing the standards.**
- **State Aviation Standards may be developed for airport pavement and related construction specifications**
  - Starting point for state standards should be AC 150/5370-10
  - State must submit proposed standards with an assurance that safety will not be affected and life of pavement will be same as with FAA specs
  - FAA Office of Airport Safety and Standards will issue approval letter
- **Several states have received FAA approval, others are in the works**

AC 150/5320-6G
Airport Pavement Design & Evaluation

- **Release in March 2021**
- **Will include update to FAARFIELD 2.0**
- **Less FAA Approval, more Document in Engineer's Report**
- **Expanded Discussions on**
  - Pavement Drainage Layers
  - Maintenance vs. Rehabilitation vs. Reconstruction
  - Overlay Design

AC 150/5335-5D
Pavement Strength Reporting

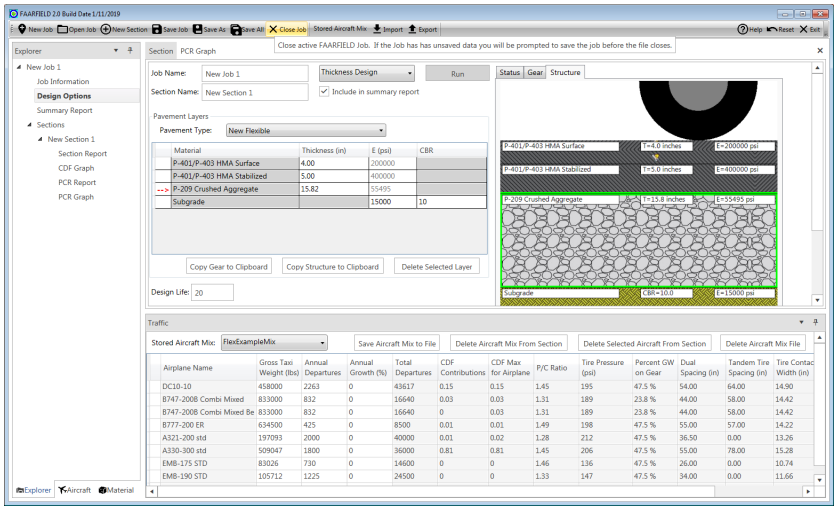
- **Release in March 2021**
- **ICAO adopted Amendment 15 to Annex 14, Vol 1 including new pavement strength reporting**
  - –Effective in July 2020
  - –Applicable in Nov 2024
- **Aircraft Classification Rating / Pavement Classification Rating**
- **Based upon Layer Elastic Theory**
- **FAARFIELD 2.0 will include PCR**

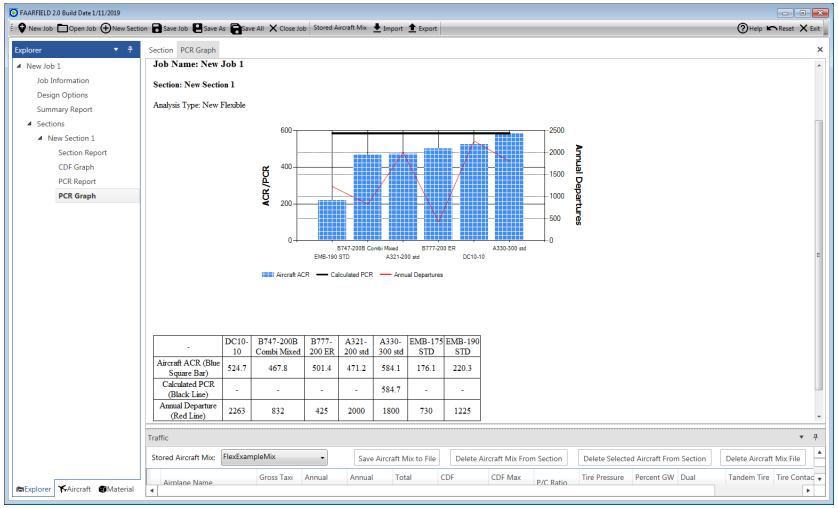
Software Programs

FAARFIELD 2.0

FAARFIELD 2.0

- **Support for ACR-PCR.**
- **Release with AC 150/5320-6G and 150/5335-5D.**
- **Modernized graphical user interface (GUI).**
  - Job and section entry.
  - Improved start-up screen.
  - Explorer-based navigation.
  - Improved flow between screens.
- **All .NET compatible.**
- **Rational data file structure.**
- **On-demand report generation.**
- **No change to thickness design requirements at this time.**

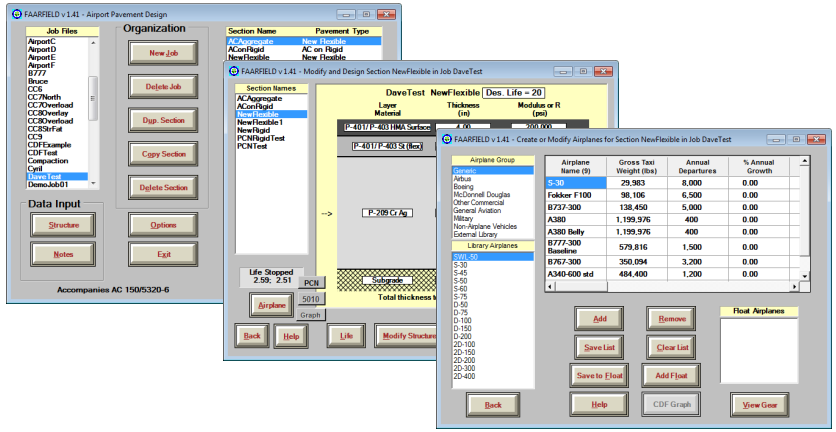


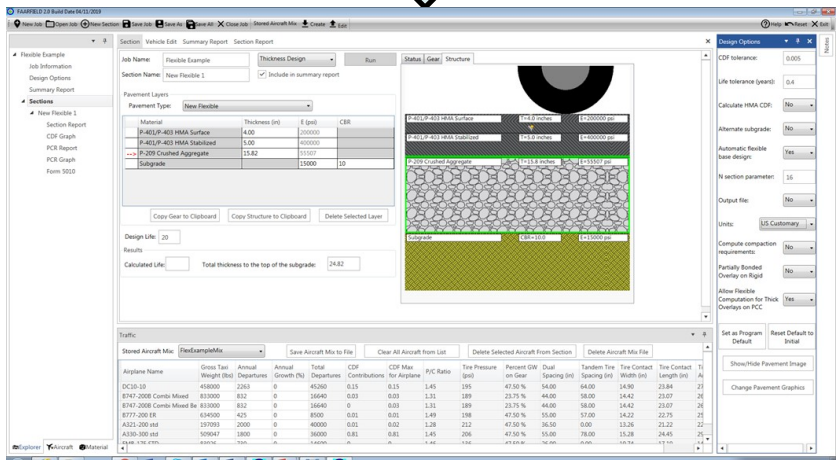


GUI Modernization

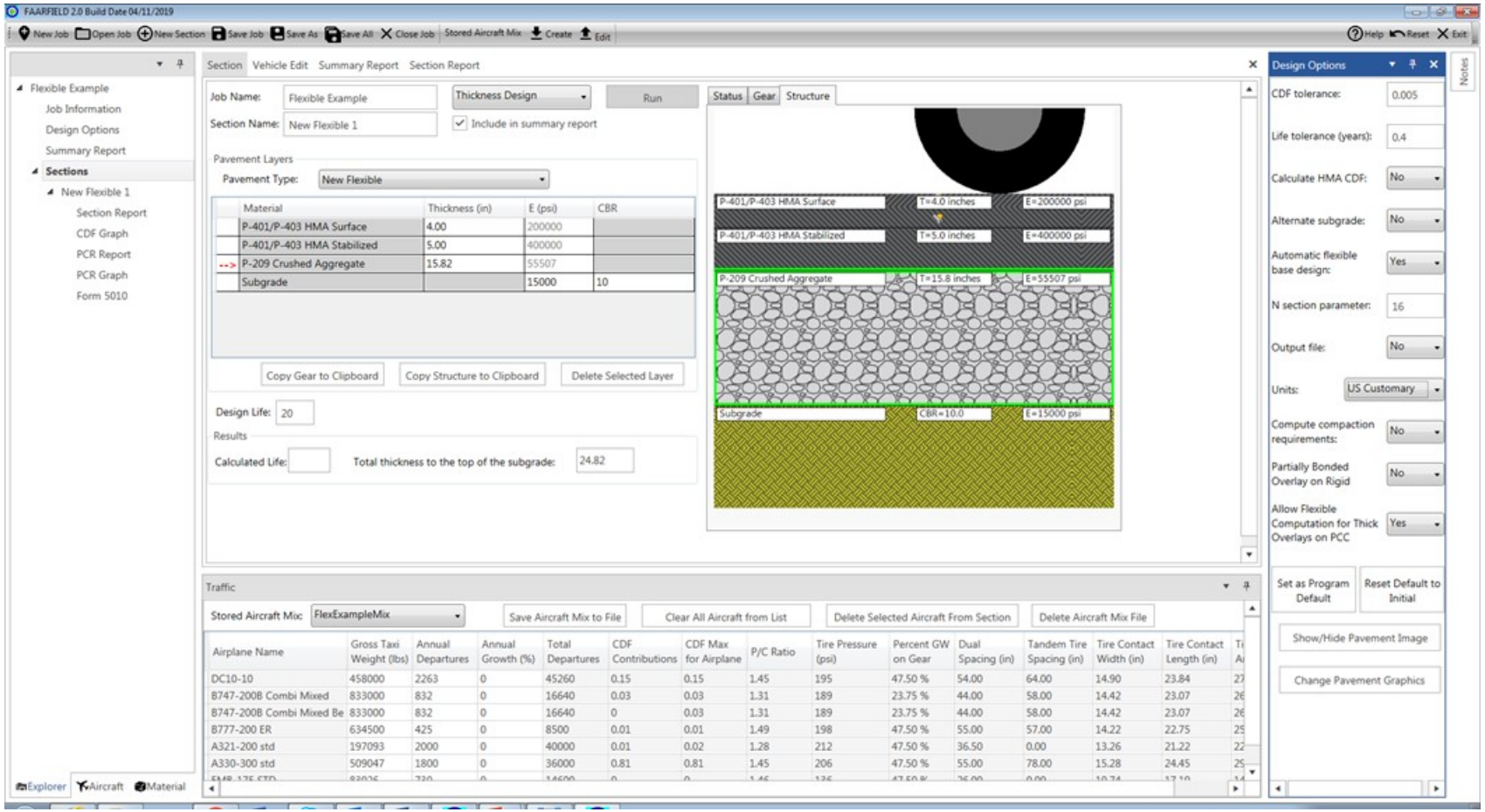
Major improvements:

- Easier job and section entry.
- Explorer-based navigation.
- Improved screen re-sizing and appearance.
- Improved flow between screens.
- Ability to store traffic mixes.
- Rationalized data file structure.
- On-demand report generation.
- Remove program logic from GUI controls.
- Etc.

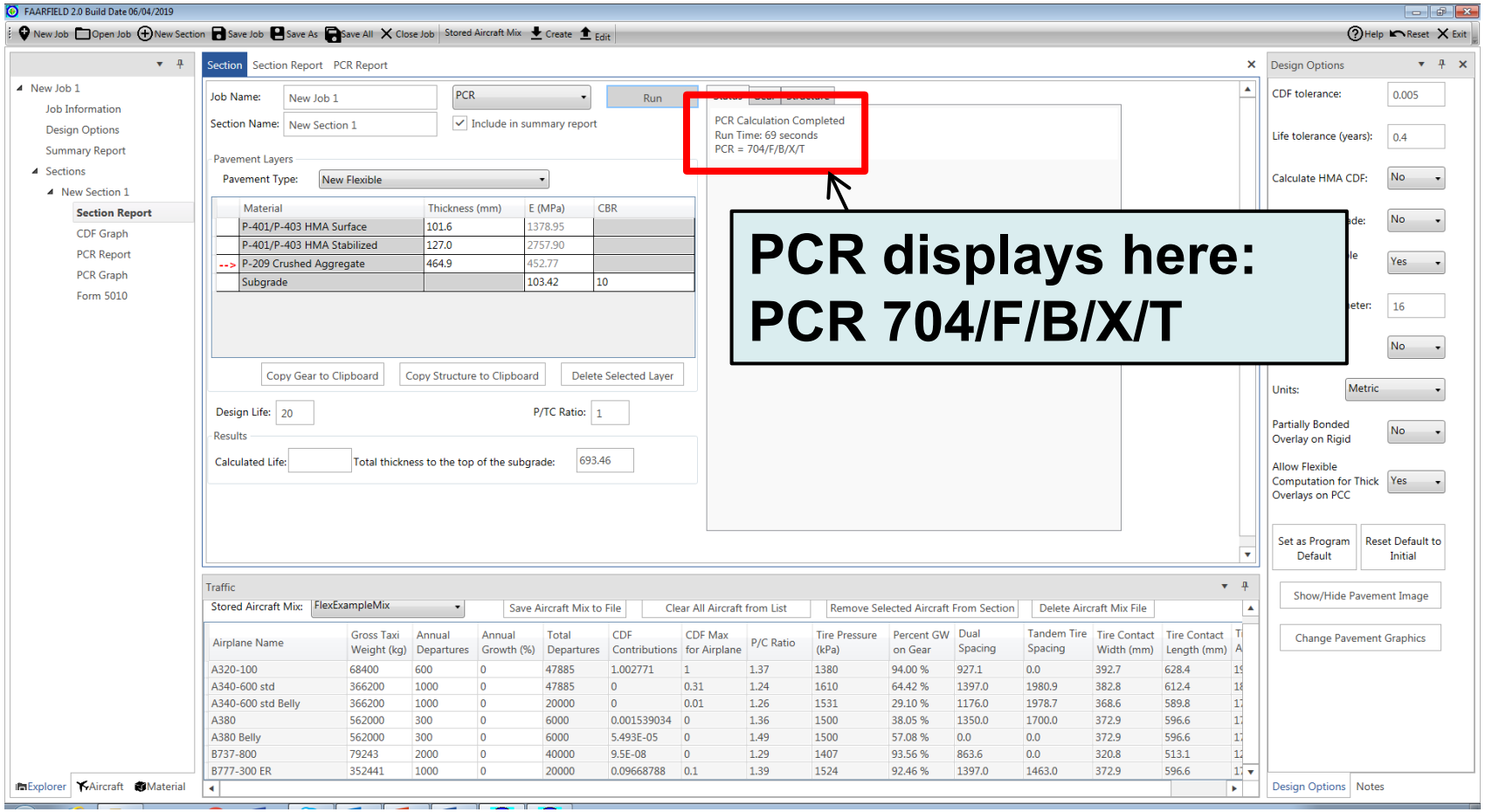




FAARFIELD 2.0 Design



FAARFIELD 2.0 PCR



AC 150/5370-10H

Standard Specifications for Construction of Airports

- **Last Errata issued 19 Aug 2020**
- **AC Version posted on FAA website includes all errata changes (both word and pdf)**

- **Potential Change 1 in the works in 2021**
  - Address some field issues with current specs
  - Consider addition of a few new specs

Engineer Brief #102
Asphalt Treated Permeable Base

- **Release in March 2021**
- **Includes new specification P-407 Asphalt Treated Permeable Base Course**
  - Included in 150/5320-6G design guidance
  - Can be used on AIP funded projects without MOS
  - Will look to incorporate into next update to 5370-10

Applied Pavement Technology Program

FAA Reauthorization Act of 2018

SEC. 744. RESEARCH AND DEPLOYMENT OF CERTAIN AIRFIELD PAVEMENT TECHNOLOGIES.

49 USC 44505 note.

Using amounts made available under section 48102(a) of title 49, United States Code, the Administrator of the Federal Aviation Administration may carry out a program for the research and development of aircraft pavement technologies under which the Administrator makes grants to, and enters into cooperative agreements with, institutions of higher education and nonprofit organizations that—

(1) research concrete and asphalt airfield pavement technologies that extend the life of airfield pavements;

(2) develop and conduct training;

(3) provide for demonstration projects; and

(4) promote the latest airfield pavement technologies to aid in the development of safer, more cost effective, and more durable airfield pavements.

Applied Pavement Technology Program

- **FAA received $7M in funding in FY2020**
  - $3.5M for ACPTP
  - $3.5M for AAPTP
- **Cooperative Agreements with Tech Center**
  - AAPTP: National Asphalt Pavement Association (NAPA)
  - ACPTP: CP Tech Center at Iowa State University
- **FAA Oversight, Industry led**
- **Additional funding possible in future fiscal years**

Questions!

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