

Airport Cooperative Research Program (ACRP) Overview

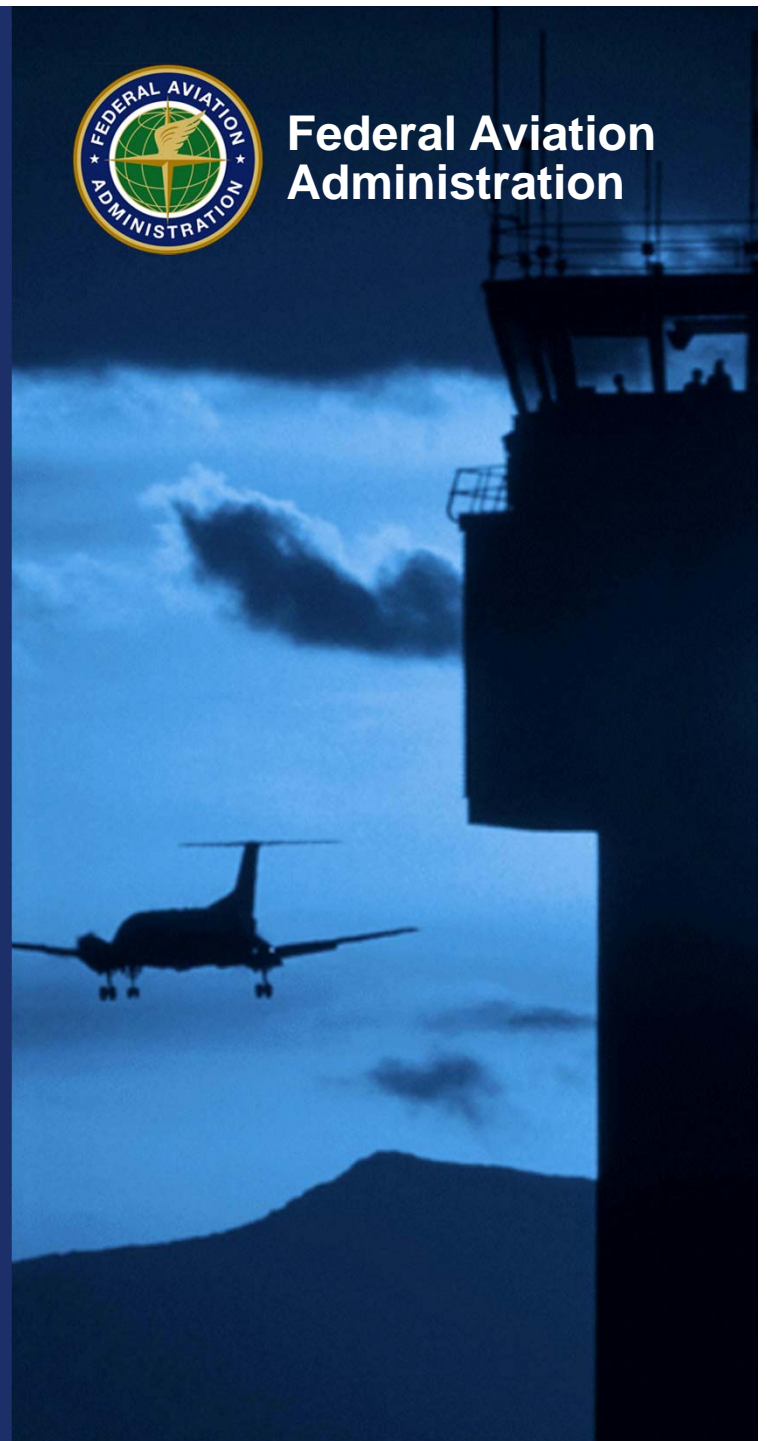
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OUTLINE

- Airport Technology R&D
- ACRP General Information
 - Purpose
 - Research Areas
 - 3 Ways YOU can Participate
 - Research/Project Process
 - AOC
 - Program Funding
 - FY12 Publications
 - New FY13 Projects



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Airport Technology R&D

- Internal
 - FAA WJH Technical Center
- External
 - Cooperative Research Programs
 - ACRP – Airport Cooperative Research Program
 - IPRF – Innovative Pavement Research Foundation
 - AAPTP – Airfield Asphalt Pavement Technology Program
 - CEAT – Center of Excellence for Airport Technology



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ACRP Purpose

To carry out applied research on problems that are shared by airport operating agencies and that are not being adequately addressed by existing federal research programs.

- Focus on *applied research*
- Customers: Airport Operators
- An Industry-Driven Program



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Research Areas

01. Administration

02. Environment

03. Policy and Planning

04. Safety

05. Security

06. Human Resources

07. Design

08. Construction

09. Maintenance

10. Operations

11. Special Projects

11-01 Legal Aspects of
Airport Programs

11-02 Quick Response for
Special Needs

11-03 Synthesis of
Information Related to
Airport Problems

11-04 Graduate Research
Award Program

11-05 Dissemination of ACRP
Research Results

11-06 Assessment of ACRP
Processes



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3 Ways to Participate

- 1** ➤ **As a concerned American:**
 - Submit a Research Problem Statement
- 2** ➤ **As a smart American**
 - Serve as an expert on our technical panels
- 3** ➤ **As a resourceful American**
 - Submit a proposal to study new projects



ACRP Wants YOU!



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Project Development



NAS/TRB Research Process



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ACRP Oversight Committee (AOC)

Chair

James Wilding, *MWAA (Retired)*

Vice Chair

Jeff Hamiel, *MAC*

Members

James Crites, *DFW*
Richard de Neufville, *MIT*
Kevin Dolliole, *STL*
John Duval, *MassPort*
Steve Grossman, *OAK*
Kelly Johnson, *NWA*
Catherine Lang, *FAA*
Gina Marie Lindsey, *MSC*
Carolyn Motz, *HGR*
Richard Tucker, *HSV*
Kitty Freidheim, *Pvt*

Ex Officio Members

Paula Hochstetler, *ACC*
Sabrina Johnson, *EPA*
Richard Marchi, *ACI-NA*
Laura McKee, *ATA*
Henry Ogrodzinski, *NASAO*
Melissa Sabatine, *AAAE*
Robert Skinner, *TRB*

Secretary

Christopher Jenks, *TRB*



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Program Funding

- FY '05 \$ 3 Million
- FY '06 - 08 \$10 Million
- FY '09 - 11 \$15 Million
- FY '12 & Beyond \$15 Million (ant.)
 - (\$5M/yr to Env.)



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FY12 Report Publications

- Publication of Report 37A - Guidebook for Measuring Performance of Automated People Mover Systems at Airports (03-07), March 2012
- Publication of Report 53 - A Handbook for Addressing Water Resource Issues Affecting Airport Development Planning (02-11), Oct. 11
- Publication of Report 55 - Passenger Level of Service and Spatial Planning for Airport Terminals (03-05), Oct. 11
- Publication of Report 57 - The Carbon Market: A Primer for Airports (11-02/T18), Nov. 11
- Publication of Report 58 - Airport Industry Familiarization and Training for Part-Time Airport Policy Makers (11-02/T15), Dec. 11
- Publication of Report 59 - Information Technology Systems at Airports - A Primer (1-12), Dec. 11
- Publication of Report 60 - Guidelines for Integrating Alternative Jet Fuel into the Airport Setting (2-18), Feb. 12
- Publication of Report 61 - Elimination or Reduction of Baggage Recheck for Arriving International Passengers (10-09), Mar. 12
- Publication of Report 62 - Airport Apron Management and Control Programs (04-07), May 12
- Publication of Report 63 - Measurement of Gaseous HAP Emissions from Idling Aircraft as a Function of Engine and Ambient Conditions (02-03A), May 12



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FY12 Report Publications (Cont.)

- Publication of Report 64 - Handbook for Evaluating Emissions and Costs of APUs and Alternative Systems (02-25), May 12
- Publication of Report 65 - Guidebook for Airport Irregular Operations (IROPS) Contingency Planning (10-10), Mar. 12
- Publication of Report 66 - Considering and Evaluating Airport Privatization (01-14), May 12
- Publication of Report 67 - Airport Passenger Conveyance Systems Planning Guidebook (03-14), June 12
- Publication of Report 68 - Guidebook for Evaluating Terminal Renewal Versus Replacement Options (07-07), June 12
- Publication of Report 69 - Asset and Infrastructure Management for Airports - Primer and Guidebook (01-16), July 12
- Publication of Report 70 - Guidebook for Implementing Intelligent Transportation Systems Elements to Improve Airport Traveler Access Information (10-08), August 12
- Publication of Report 71 - Guidance for Quantifying the Contribution of Airport Emissions to Local Air Quality (02-08), July 12
- Publication of Report 73 - Airport-to-Airport Mutual Aid Programs (04-10), July 12



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FY12 Synthesis Publications

- Publication of Synthesis 25 - Strategies for Reuse of Underutilized or Vacant Airport Facilities (S03-06), Oct. 11
- Publication of Synthesis 27 - Airport Self-Inspection Practices (S06-02), Oct. 11
- Publication of Synthesis 28 - Investigating Safety Impacts of Energy Technologies on Airports and Aviation (S10-06), Oct. 11
- Publication of Synthesis 29 - Ramp Safety Practices (S10-05), Nov. 11
- Publication of Synthesis 30 - Airport Insurance Coverage and Risk Management Practices (S01-03), Jan. 12
- Publication of Synthesis 31 - Airline and Airline-Airport Consortiums to Manage Terminals and Equipment (S1-04), Nov. 11



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FY12 Synthesis Publications (Cont.)

- Publication of Synthesis 32 - Managing Aerial Firefighting Activities on Airports (S04-08), June 12
- Publication of Synthesis 33 - Airport Climate Adaptation and Resilience (S02-06), Jun. 12
- Publication of Synthesis 34 - Subsurface Utility Engineering Information Management for Airports (S09-03), July 12
- **Publication of Synthesis 35 - Issues With Use of Airfield LED Light Fixtures (S09-04), July 12**
- Publication of Synthesis 36 - Exploring Airport Employee Commute and Parking Strategies (S06-03), August 12
- Publication of Synthesis 37 - Lessons Learned from Airport Safety Management Systems Pilot Studies (S04-07), August 12



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FY12 Other Publications

- Publication of Graduate Research Award Program on Public-Sector Aviation Graduate Research Award Papers 2010-2011 (11-04), August 12
- Publication of Legal Research Digest 12 - Fair Disclosure and Airport Impact Statements in Real Estate Transfers (11-01/3-01), Nov. 11
- Publication of Legal Research Digest 13 - An Index and Digest of Decisions: Compilation of Airport Law Resources - Complement to 01-03 (04-05), Mar. 12
- Publication of Legal Research Digest 14 - Achieving Airport-Compatible Land Uses and Minimizing Hazardous Obstruction in Navigable Airspace (11-01/combo 02-01&02-02), April 12
- Publication of Legal Research Digest 15 - Compilation of State Airport Authorizing Legislation (11-01/3-02), Sept. 12
- Publication of Research Results Digest 13 - Synthesis of Information Related to Airport Practices, Jan. 12
- Publication of Research Results Digest 14 - Graduate Research Award Program on Public-Sector Aviation Issues, Jan. 12
- Publication of Research Results Digest 15 - Use of Towbarless Tractors at Airports - Best Practices, (4-07A), Mar. 12
- Publication of ACRP 2011 Annual Report of Progress, Jan. 12
- Web Only Document 13, Alternative Fuels as a Means to Reduce PM2.5 Emissions at Airports, June 12



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FY 13 Projects

Project No.	Title
01-23	Mitigating Disruptive Interference in the Unlicensed Spectrum (WiFi) at Airports
01-24	Renewable Energy as an Airport Revenue Source
01-25	Promoting Diversity and Small Business Participation Between Commercial Airports and Airport Business Partners
02-43	Development of NOX-to-NO2 Conversion Rates for Airport Air Quality Modeling
02-44	Guidance for Helicopter Community Noise Prediction
02-45	Assessment of Methodologies to More Accurately Quantify Aircraft Emissions Under Low Power Conditions
02-46	Improving Ground Support Equipment Operational Data For Airport Emissions Modeling
03-29	Analysis of the Impact of Airline Consolidation on Smaller/Underserved Markets
03-30	Impact of Commercial Unmanned Aerial Vehicles on Airports



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FY 13 Projects (Cont.)

Project No.	Title
04-16	Guidance for Airport Safety Risk Management
04-17	Integrating Airport Wildlife Management into the Safety Management System
05-02	Cyber-security Best Practices at Airports
09-09	LED Runway And Taxiway Light Operation and Maintenance Considerations
09-10	Benchmarking Terminal Energy End Uses: Determining Priorities for Future Upgrades
10-16	Guidelines for Improving Taxicab, Limousine, and Shared-Ride Van Operations at Airports
10-17	Optimizing and Integrating Airline and Airport Self-Service
10-18	Comprehensive—Integrated Management of Maintenance Operations at General Aviation Airports
10-19	Information Guide and Tools for Deploying Common Data Sharing with Collaborative Decision Making
10-20	Airport Communications Center Technologies and Design

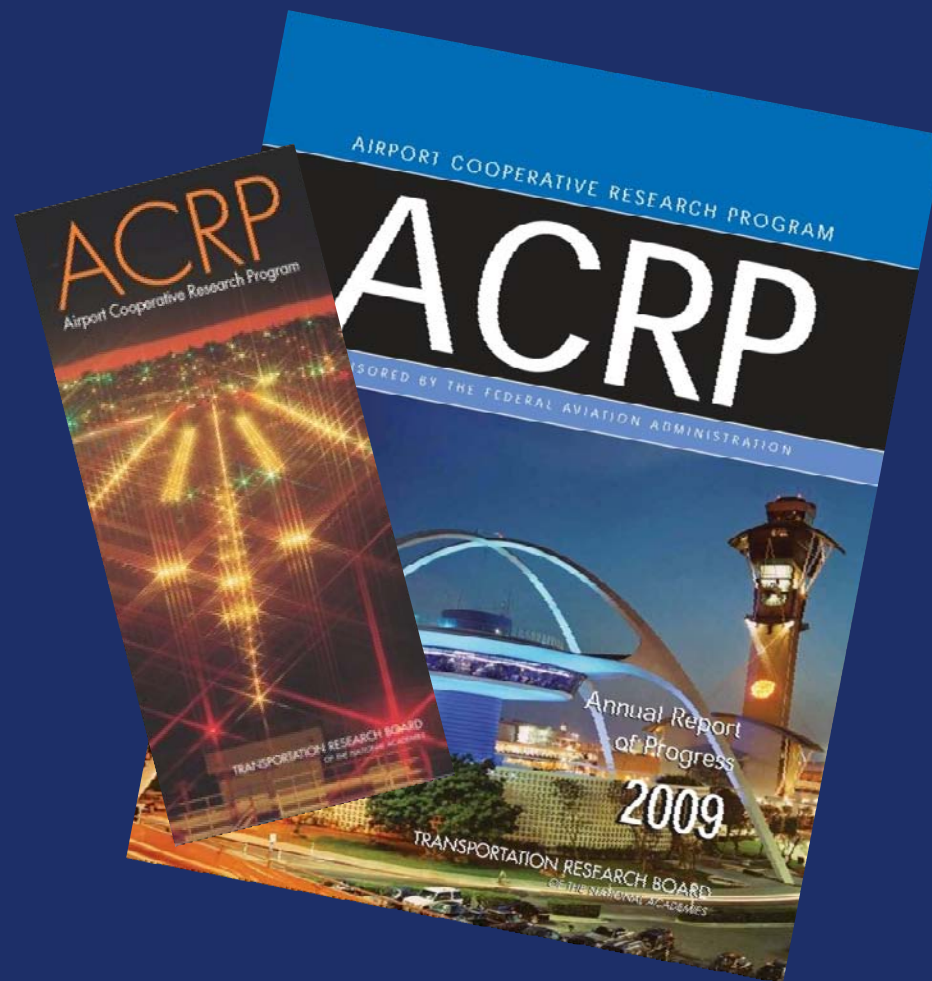


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For More Information

www.TRB.org/ACRP

- ❖ Information on ACRP (look for our brochures)
- ❖ Search engine
- ❖ All research projects
- ❖ Project statements (requests for proposals)
- ❖ Anticipated projects
- ❖ ACRP publication lists (how to order)
- ❖ Sign-up to receive email
 - notification of RFPs
 - notification of new publications
- ❖ Online forum for success stories



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Thank You!

POC

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