

ACRP 2014 Research Problems Submitted**Total Problems:108**

Problem Statement Number	Title / Submitter (Agency)	Amount	Duration (Months)	Date Submitted
<u>14-01-01</u>	<u>Assumption of Responsibility for Traditional Airline and Government Functions- How Are These Roles Adjusting to the Changing Times</u> Mark H. Mellinger (Northwest Arkansas Regional Airport)	\$150,000	12	03/08/2013
<u>14-01-02</u>	<u>Best Practices in Surveying Entire Door-to-door Experiences of Airport Customers</u> Mark H. Mellinger (Northwest Arkansas Regional Airport)	\$150,000	12	03/08/2013
<u>14-01-03</u>	<u>Airport Revenue Generating Practices and Forecasting Facing Exogenous Uncertainty</u> Bo Zou (University of Illinois at Chicago)	\$300,000	12	03/12/2013
<u>14-01-04</u>	<u>Developing the Business Case for GIS Implementation</u> Jeannette Hilaire-Stoufer (Denver International Airport)	--	15	03/13/2013
<u>14-01-05</u>	<u>Net-centric Airport Attributes and Benefits to Serve the NextGen Passenger</u> Chris Brinton (and Stephen Vail, Mosaic ATM, Inc)	\$400,000	15	03/15/2013
<u>14-01-06</u>	<u>Consistent Data Reporting by Airports</u> Joanne Landry (Landry Consultants LLC and Theodore Mansfield, Inst for Transp. Research and Education)	\$400,000	18	03/15/2013
<u>14-01-07</u>	<u>Enterprise Data Warehouse and Reporting Solutions for Airports</u> Joanne Landry (Landry Consultants LLC and Theodore Mansfield, Inst for Transp. Research and Education)	\$300,000	18	03/15/2013
<u>14-01-08</u>	<u>Property Acquisition Costs Related to Runway Protection Zone (RPZ) Standards</u> Alex de Barros, PhD (University of Calgary)	\$400,000	24	03/15/2013

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<u>14-01-09</u>	<u>Managing Relationships with Airport Stakeholders, Partners, and Users</u> Robert Chapman (Delta Airport Consultants, Inc.)	\$200,000	12	03/15/2013
<u>14-01-10</u>	<u>Improving Airport Customer Experience</u> Lou Wolinetz (Infrastructure Management Group)	\$400,000	12	03/15/2013
<u>14-01-11</u>	<u>Community Engagement with NextGen</u> AOC Strategic Theme	\$300,000	15	04/30/2013
<u>14-01-12</u>	<u>NextGen Primer</u> AOC Strategic Theme	\$750,000	24	04/30/2013
<u>14-02-01</u>	<u>Measurement of Aircraft Emissions at Regional Airports</u> David S. Liscinsky (United Technology Research Center)	\$400,000	12	03/08/2013
<u>14-02-02</u>	<u>Leak Detection Technologies for Protecting Airport Fuel Assets</u> Shane Siebenaler (Southwest Research Institute)	\$300,000	18	03/11/2013
<u>14-02-03</u>	<u>Hard and Soft Ground Sound Absorption Methodology for AEDT/INM</u> Eric R. Boeker (US DOT, John A. Volpe National Transp. Systems Center and Natalia Sizov, TRB ADC40)	\$250,000	18	03/14/2013
<u>14-02-04</u>	<u>Water Conservation Strategies for Airports</u> Paul Faeth (Institute for Public Research, CAN)	\$450,000	18	03/15/2013
<u>14-02-05</u>	<u>Environmental Aircraft Landing Charges for Airport Local Air Quality and Noise Management</u> Gareth Horton (Ricardo-AEA Ltd)	\$250,000	15	03/15/2013
<u>14-02-06</u>	<u>Improved Estimates of Fugitive Particulate Emissions for Airport Emissions Inventories</u> Martin Peirce (Ricardo-AEA)	\$350,000	21	03/15/2013

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<u>14-02-07</u>	<u>Improved Activity-Related Emission Factors for GSE for Airport Emissions Inventories</u> Hazel Peace (Aviation Ricardo- AEA)	\$450,000	24	03/15/2015
<u>14-02-08</u>	<u>Guidebook on Accommodating Engineless Taxiing at Airports</u> Yu Zhang (University of South Florida, Civil and Environmental Engineering)	\$250,000	18	03/15/2013
<u>14-02-09</u>	<u>Solutions for Fire Suppression System Discharges</u> Tiffany Moss (Dallas/Fort Worth International Airport)	\$250,000	18	03/15/2013
<u>14-02-10</u>	<u>Storm Water Impacts from Electric GSE Charging Stations at Airports</u> Tiffany Moss (Dallas/Fort Worth International Airport)	\$500,000	24	03/15/2013
<u>14-02-11</u>	<u>Planning for Renewable Energy Opportunities That Maximize Financial Benefit and Are Compatible with Airports and Aviation</u> Stephen Barrett (Harris Miller Miller & Hanson Inc. and TRB Cmte AV030)	\$400,000	16	03/15/2013
<u>14-02-12</u>	<u>Methodologies to Monetize Airport Level Energy and Environmental Impacts</u> Alice Fan (Booz Allen Hamilton)	\$350,000	18	03/15/2013
<u>14-02-13</u>	<u>Improving/Revising Airport Noise Compatibility Planning (Part 150) with AEDT</u> Chrishanth Fernando (Booz Allen Hamilton)	\$350,000	16	03/15/2013
<u>14-02-14</u>	<u>Methodology to Improve AEDT Quantification of Terminal Area Aircraft Performance</u> Greg Raiffa (Booz Allen Hamilton)	\$400,000	18	03/15/2013
<u>14-02-15</u>	<u>Interpreting Airport Water Monitoring Results</u> Dean Mericas (TRB Cmte on Environment, Mead & Hunt, Inc.)	\$200,000	18	03/15/2013
<u>14-02-16</u>	<u>Planning Guidance for Airport Water Conservation Programs</u> Dean Mericas (TRB Cmte on Environment, Mead & Hunt, Inc.)	\$300,000	24	03/15/2013

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<u>14-02-17</u>	<u>Estimating People and Cargo Access Flows for Airport Emissions Inventories</u> Bruno Miller (TRB Cmte AV030 and Metron Aviation)	\$400,000	18	03/15/2013
<u>14-02-18</u>	<u>Environmental and Capacity Interdependencies of Arrival, Departure, and Surface Operations</u> Clint Morrow (KB Environmental Sciences, Inc)	\$300,000	18	03/15/2013
<u>14-02-19</u>	<u>High Altitude Aircraft Noise Methodology for AEDT/INM</u> Eric R. Boeker (US DOT, John A. Volpe National Transp. Systems Center and Natalia Sizov, TRB ADC40)	\$460,000	24	03/14/2013
<u>14-02-20</u>	<u>Guidance to Assist Airports in Determining the Environmental Benefits of Implementing Intersection Departures</u> John Cookson (Ricardo-AEA, Chadwick House, Birchwood Park)	\$450,000	24	03/15/2013
<u>14-02-21</u>	<u>Design and Implement a Program to Assess whether Helicopter Noise Annoyance is Significantly Different from Jet Aircraft Noise Annoyance</u> Nicholas Miller (Harris Milller Miller & Hanson Inc.)	\$700,000	24	03/15/2013
<u>14-02-22</u>	<u>Aircraft Flight Simulator Tool for Modeling Flight Profiles</u> Kevin Bradley (Blue Ridge Research and Consulting, LLC)	\$400,000	24	03/25/2013
<u>14-02-23</u>	<u>Optimization of Aircraft Fuel Consumption in the Terminal Area</u> Micah Downing (Blue Ridge Research and Consulting, LLC)	\$350,000	20	03/25/2013
<u>14-02-24</u>	<u>Optimization of Aircraft Flight Procedures for Noise Reduction Beyond DNL 65</u> Micah Downing (Blue Ridge Research and Consulting, LLC)	\$350,000	18	03/25/2013
<u>14-02-25</u>	<u>Guidebook for Lead Emissions Reductions at Airports</u> Warren Gillette (Federal Aviation Administration)	\$200,000	12	03/26/2013
<u>14-02-26</u>	<u>Energy and Environmental Benefit of Electrified Taxi Options to Airports</u> Pat Moran (Federal Aviation Administration)	\$300,000	15	03/26/2013

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<u>14-02-27</u>	<u>Determining Whether Unmanned Aircraft Systems (UAS) Will Have Environmental and Energy Influences at Airports</u> Pat Moran (Federal Aviation Administration)	\$400,000	18	03/26/2013
<u>14-02-28</u>	<u>Evaluation of Noise Level Reduction Test Methods</u> Rebecca Cointin (Federal Aviation Administration)	\$300,000	12	03/26/2013
<u>14-02-29</u>	<u>Assessing Aircraft Noise Conditions Affecting Student Learning - Case Studies</u> Rebecca Cointin (Federal Aviation Administration)	\$600,000	24	03/26/2013
<u>14-02-30</u>	<u>Noise Measurement Procedure for Federally Funded Airport Sound Insulation Programs</u> Ben H. Sharp (Wyle, Environment and Energy Research and Consulting)	\$250,000	12	03/15/2013
<u>14-02-31</u>	<u>Understanding the Potential Benefits of Time-Varying Atmospheric Dispersion Models to Airports</u> Brian Kim (Wyle Inc., Wyle Environmental and Energy Research & Consulting)	\$400,000	16	03/19/2013
<u>14-02-32</u>	<u>Guidance to Improve Ground Access Vehicle (GAV) Emissions Modeling for Airport Emissions Inventories</u> Brian Kim (Wyle Inc., Wyle Environmental and Energy Research & Consulting)	\$300,000	14	03/19/2013
<u>14-02-33</u>	<u>The Effects of Buildings on Airport Noise Contours</u> Joseph J. Czech (Wyle, Environmental and Energy Research and Consulting)	\$200,000	12	03/15/2013
<u>14-02-34</u>	<u>Guidance for Modeling Noise for Non-Standard Aircraft Profiles</u> Juliet Page (and Ben Sharp, Wyle Environmental and Energy Research Consulting)	\$350,000	18	03/19/2013
<u>14-02-35</u>	<u>Understanding and Improving General Aviation Emissions</u> Brian Kim (Wyle Inc., Wyle Environmental and Energy Research & Consulting)	\$500,000	18	03/19/2013
<u>14-02-36</u>	<u>Sustainable Airport Business Practices and Initiatives</u> Sara A. Freese (The Eastern Iowa Airport)	\$200,000	18	03/15/2013

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<u>14-03-01</u>	<u>Strategies for Funding Airport Infrastructure</u> Mark H. Mellinger (Northwest Arkansas Regional Airport)	\$300,000	18	03/08/2013
<u>14-03-02</u>	<u>Viability of Air Service Incentives, Fee Waivers and Other Possible Models of Adding Air Services</u> Mark H. Mellinger (Northwest Arkansas Regional Airport)	\$150,000	12	03/08/2013
<u>14-03-03</u>	<u>Developing Cost Effective Aircraft Traffic Monitoring Systems</u> Vivek Khanna (Oklahoma Aeronautics Commission)	\$400,000	24	03/15/2013
<u>14-03-04</u>	<u>Quantifying Storm Surge Inundation Risk for Coastal Airports</u> Christopher Bender (Taylor Engineering, Inc.)	\$300,000	16	03/14/2013
<u>14-03-05</u>	<u>A Guidebook to Develop General Aviation Airports in Conformance with Their Role in the National Airport System</u> Vivek Khanna (Oklahoma Aeronautics Commission)	\$225,000	15	03/14/2013
<u>14-03-06</u>	<u>Development of a NextGen Primer for Airports</u> Clint Morrow (KB Environmental Sciences, Inc)	\$100,000	12	03/15/2013
<u>14-03-07</u>	<u>Integrating GIS, Document, and Communication Technologies for Collaborative Aviation Planning</u> Mihir P. Shah (South Carolina Aeronautics Commission)	\$400,000	12	03/15/2013
<u>14-03-08</u>	<u>Guidebook for the Preparation of Airport Planning Day Schedules</u> Lloyd McCoomb (Canadian Air Transport Security Authority)	\$250,000	12	03/15/2013
<u>14-03-09</u>	<u>Capturing and Synthesizing Port Authority of New York & New Jersey Hurricane Sandy Experiences</u> Jerry Sparks (Dewberry)	\$90,000	6	01/02/2013
<u>14-03-10</u>	<u>Assessment of Severe Weather Condition Impacts on Airport Infrastructure and Operations and Prevention Strategies</u> Andrea Freeburg (Federal Aviation Administration)	\$250,000	9	03/26/2013

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<u>14-03-11</u>	<u>NextGen Procedure Changes for Airspace and Aircraft Efficiency and Optimization</u> AOC Strategic Theme	\$500,000	18	04/24/2013
<u>14-03-12</u>	<u>Aligning Community Expectations with Airport Roles</u> AOC Misc. Themes from Workshop	\$250,000	15	04/24/2013
<u>14-03-13</u>	<u>Service Issues for International Customers at U.S. Airports</u> AOC Misc. Themes from Workshop	\$100,000	15	04/24/2013
<u>14-03-14</u>	<u>Airport Strategies for Maintaining Air Service</u> AOC Misc. Themes from Workshop	\$300,000	18	04/24/2013
<u>14-03-15</u>	<u>Airport Planning and NextGen</u> AOC Strategic Theme	\$500,000	18	04/30/2013
<u>14-04-01</u>	<u>Human Exposure Limits to Jet Blast Winds</u> Edward L. Gervais (Boeing Airport Technology Group)	--	--	01/07/2013
<u>14-04-02</u>	<u>Threat Vulnerability Assessment (TVA) Utility at Airports</u> Mike Cheston (Faith Group, LLC)	\$150,000	12	02/28/2013
<u>14-04-03</u>	<u>Vulnerabilities to the NEXGEN System and Feasible Alternatives as a Backup</u> Mark H. Mellinger (Northwest Arkansas Regional Airport)	\$300,000	12	03/08/2013
<u>14-04-04</u>	<u>Alternative Anti-Icing Airfield Runway Systems</u> Ernie Heymsfield (University of Arkansas, Department of Civil Engineering)	\$450,000	30	03/15/2013
<u>14-04-05</u>	<u>Developing Cost Effective Foreign Object Debris Detection Systems</u> Ernie Heymsfield (University of Arkansas, Department of Civil Engineering)	\$400,000	24	03/15/2013

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<u>14-04-06</u>	<u>Guidebook for Implementing and Operating a Ramp Control Facility</u> Bo Zou (University of Illinois at Chicago)	\$520,000	12	03/12/2013
<u>14-04-07</u>	<u>Developing Arresting Systems for Small Aircraft</u> Thomas F. Mahoney (Massachusetts DOT, Engineering Div)	\$350,000	12	03/13/2013
<u>14-04-08</u>	<u>Guide to Implement Airport Safety Management System (SMS) Principles across Ramp Tower Operations</u> Chris Brinton (and Stephen Vail, Mosaic ATM, Inc)	\$400,000	15	03/13/2013
<u>14-04-09</u>	<u>Risk Models for Runway Excursions of Light Aircraft</u> Geoffrey Baskir (Manuel Ayres, Pradip Som, FAA Runway Safety Office)	\$400,000	24	03/15/2013
<u>14-04-10</u>	<u>Airport Safety Data Collection and Protection</u> David Fleet (Futron Corporation)	\$400,000	15	03/15/2013
<u>14-04-11</u>	<u>Airport Emergency Planning Template (AEPT) for National Incident Management System (NIMS)/Incident Command System (ICS) Compliance at Airports</u> Donald W. Griffith (IEM, Inc. (Innovative Emergency Management))	\$400,000	18	03/15/2013
<u>14-04-12</u>	<u>Interior Fire on a Commercial Aircraft: A Systematic Approach to Preparedness and Emergency Operations</u> Robert Donahue (Massport Authority Fire Rescue, Boston Logan International Airport)	\$450,000	16	03/15/2013
<u>14-04-13</u>	<u>Comprehensive Emergency Response Exercises</u> Bonnie Wilson (Jackson Municipal Airport Authority)	\$200,000	12	03/15/2013
<u>14-04-14</u>	<u>An Evaluation of Technology Standards in Airport Emergency Operations Centers (AEOCs)</u> Joanne Landry (Landry Consultants LLC and Theodore Mansfield, Inst for Transp. Research and Education)	\$200,000	12	03/10/2013

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<u>14-04-15</u>	<u>Airport System Safety Leadership -- Barriers, Considerations, and Solutions</u> Kenneth P. Neubauer (Futron Corporation)	\$300,000	18	03/15/2013
<u>14-04-16</u>	<u>FAA Airports Division National On-Line Hazard Repository.</u> Benjamin Lacy (Concurrent Tech Corporation)	\$203,000	7	03/15/2013
<u>14-06-01</u>	<u>Skills and Training Necessary for the Next Generation of Airport Leaders and How to Recruit the Right Person</u> Mark H. Mellinger (Northwest Arkansas Regional Airport)	\$150,000	12	03/08/2013
<u>14-06-02</u>	<u>Fatigue Management for Ramp Workers</u> Laura K. Barger (Harvard Medical School)	\$500,000	24	03/15/2013
<u>14-06-03</u>	<u>Assessing, Building, and Retaining Workforce Capacity in the Aviation Industry</u> Candace Blair Cronin (and Christopher Riches, ICF International)	\$500,000	18	03/15/2013
<u>14-06-04</u>	<u>Pilot Perception of LED Lighting</u> Geoffrey Baskir (Manuel Ayres, Pradip Som, FAA Runway Safety Office)	\$250,000	18	03/15/2013
<u>14-07-01</u>	<u>ACRP Airport Baggage Handling Opportunity</u> Edward J. Jacob (Aviation Concepts, Inc.)	\$800,000	24	03/12/2013
<u>14-07-02</u>	<u>Selection of Long-Lasting Sustainable Pavement Materials and Their Economic Impacts</u> Maryam Sakhaeifar (Texas A&M University, Zachry Dept. of Civil Engineering)	\$200,000	24	03/14/2013
<u>14-07-03</u>	<u>Development of an Airport Wayfinding System for Elderly or Disabled Travelers</u> Billie Louise (Beezy) Bentzen (Accessible Design for the Blind)	\$500,000	24	03/15/2013
<u>14-07-04</u>	<u>Terminal Area Wingtip Collisions</u> Geoffrey Baskir (Manuel Ayres, Pradip Som, FAA Runway Safety Office)	\$400,000	24	03/15/2013

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<u>14-07-05</u>	<u>Employing Pedestrian Connections and Rail Transit to Benefit Landside Development</u> Sarah Elizabeth Ross (Lea+Elliot, Inc.)	\$200,000	12	03/15/2013
<u>14-07-06</u>	<u>Understanding Hydraulic Fracturing Effects on Airports and Aviation</u> Scott R. Brummond (Wisconsin Dept. of Transportation, Bureau of Aeronautics)	\$400,000	18	03/21/2013
<u>14-07-07</u>	<u>Analysis of Alternate Materials Testing Procedures For Cement Treated Aggregate as They Relate to FAA Advisory Circular 150-5370 Standard Specifications for Construction of Airports</u> H.D. Campbell (4215 Lafayette Center Drive, Suite 2)	--	--	04/03/2013
<u>14-09-01</u>	<u>Best Practices Guide: Smoothness Remediation for Airport Paving Projects</u> Tony Gerardi (APR Consultants Inc.)	\$450,000	24	02/20/2013
<u>14-09-02</u>	<u>Field Performance of Asphalt Airport Pavement Preservation Treatments at General Aviation Airports</u> Vivek Khanna (Oklahoma Aeronautics Commission)	\$350,000	24	03/14/2013
<u>14-09-03</u>	<u>Using Deflection Data to Develop a Mechanistic Pavement Distress Index and FWD Estimated Modulus Decay Models</u> Vivek Khanna (Oklahoma Aeronautics Commission)	\$775,368	24	03/13/2013
<u>14-09-04</u>	<u>Driver Assist for Winter Runway and Taxiway Maintenance Operations</u> Mark Kreutzfeldt (Mark Kreutzfeld Wausau Equipment Company, Inc)	\$500,000	--	03/15/2013
<u>14-09-05</u>	<u>Reading and Understanding Blueprints/Drawings/Specifications/Geographic Information Systems (GIS) for Non-technical Staff</u> Travis Crilly (Blue Grass Airport)	\$200,000	10	03/20/2013
<u>14-09-06</u>	<u>Guidebook for Airside Systems Integration Using Safety Management Systems</u> Hamid Shirazi (Applied Research Assoc. Inc.)	--	--	03/15/2013

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<u>14-09-07</u>	<u>Airport GIS Workshop and Information Sharing Synthesis</u> AOC Strategic Theme	\$300,000	18	04/30/2013
<u>14-10-01</u>	<u>Integrating Unmanned Aircraft Systems (UAS) into Airport Operations</u> Donald W. Griffith (IEM, Inc. (Innovative Emergency Management))	\$300,000	18	03/14/2013
<u>14-10-02</u>	<u>Integration and Coordination of Airline Tarmac Delay Contingency Plans with Airport Contingency Plans</u> Rose Agnew (Aviation Innovation, LLC and team)	\$390,000	18	03/14/2013
<u>14-10-03</u>	<u>A Primer for Meeting FAA Regulatory Requirements - An Integrated Approach</u> Rose Agnew (Aviation Innovation, LLC and team)	\$250,000	18	03/15/2013
<u>14-10-04</u>	<u>Use of Campus Notification and Lockdown System</u> Joanne Landry (Landry Consultants LLC and Theodore Mansfield, Inst for Transp. Research and Education)	\$200,000	12	03/10/2013
<u>14-10-05</u>	<u>Critical Infrastructure Protection Needs at Airports</u> Duane Habeck (Intrgrated Decision Engineering Analysis, Inc.)	\$300,000	18	03/15/2013
<u>14-10-06</u>	<u>Training of Non-Airport Personnel for Response to Airport Emergencies and Unusual Occurrences</u> LaPonda Fitchpatrick (Los Angeles World Airports)	\$250,000	18	03/15/2013
<u>14-10-07</u>	<u>Reducing the Occurrence of Banned Substances and Objects at Airport Security Checkpoints</u> Daniel Findley (Institute for Transp. Research and Education and team)	\$100,000	12	03/15/2013
<u>14-10-08</u>	<u>Techniques for Measuring Aircraft Braking</u> Richard King, CM (Sioux Falls Regional Airport Authority)	\$250,000	18	03/15/2013
<u>14-10-09</u>	<u>Coordinating Glider Activities with Powered Aircraft Operations at Airports</u> Zachary Puchacz (Mead & Hunt, Inc.)	\$300,000	15	03/15/2013

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<u>14-10-10</u>	<u>Training Needs of Airport Operations Staff</u> Sarah J. Demory (Boise Airport, Airport Operations and Security)	\$200,000	12	03/15/2013
<u>14-10-11</u>	<u>Best Practices for Flight Operation Advisories at Non-Towered Airports</u> Brian McKeehan (Delta Airport Consultants, Inc.)	\$250,000	12	04/14/2013