

# Aviation

Transportation Research Record: Journal of the Transportation  
Research Board Volume 2626 (2017)

ISBN: 978-1-5108-5429-1

**Printed from e-media with permission by:**

Curran Associates, Inc.  
57 Morehouse Lane  
Red Hook, NY 12571



**Some format issues inherent in the e-media version may also appear in this print version.**

Copyright© (2017) by Transportation Research Board of the National Academies  
All rights reserved.

ISBN (Print) 978-1-5108-5429-1  
ISBN 2017 Printed Set (All Issues) 978-1-5108-5406-2

Printed by Curran Associates, Inc. (2018)

For permission requests, please contact Transportation Research Board of the National Academies  
at the address below.

Transportation Research Board  
The National Academies of Sciences, Engineering, and Medicine  
500 Fifth Street, NW  
Washington, DC 20001

Phone: (202) 334-2934  
Fax: (202) 334-2519

trbsales@nas.edu

**Additional copies of this publication are available from:**

Curran Associates, Inc.  
57 Morehouse Lane  
Red Hook, NY 12571 USA  
Phone: 845-758-0400  
Fax: 845-758-2633  
Email: curran@proceedings.com  
Web: www.proceedings.com

# TABLE OF CONTENTS

<b>Investigating Neighborhood Change in Airport-Adjacent Communities in Multi-airport Regions, 1970–2010</b> .....	1
<i>Woodburn, Amber</i>	
<b>Accuracy Assessment of Aircraft Transponder-Based Devices for Measuring Airport Operations</b> .....	9
<i>Mott, John H.; McNamara, Margaret L.; Bullock, Darcy M.</i>	
<b>Understanding the Trade-Off Between Maximum Passenger Throughput and Airline Equity in Allocating Capacity Under Severe Weather Conditions</b> .....	18
<i>Jayam, Harika; Nozick, Linda K.</i>	
<b>Unmanned Aerial Vehicle-Based Traffic Analysis: Methodological Framework for Automated Multivehicle Trajectory Extraction</b> .....	25
<i>Khan, Muhammad Arsalan; Ectors, Wim; Bellemans, Tom; Janssens, Davy; Wets, Geert</i>	
<b>Airport Features Most Likely to Affect International Traveler Satisfaction</b> .....	34
<i>Smahel, Thomas</i>	
<b>Multiscale Network Model for Evaluating Global Outbreak Control Strategies</b> .....	42
<i>Chen, Nathan; Rey, David; Gardner, Lauren</i>	
<b>Human Factors Impacts of Light-Emitting Diode Airfield Lighting</b> .....	51
<i>Bullough, John D.</i>	
<b>Use of Continuous Friction Measurement Equipment to Predict Runway Condition Rating on Unpaved Runways</b> .....	58
<i>Tingle, Jeb S.; Norwood, Gregory J.; Cotter, Brian</i>	
<b>Development and Evaluation of Enhanced Airfield Signage for Temporary Information</b> .....	66
<i>Le Bris, Gaël</i>	
<b>Modeling Small Unmanned Aircraft System Traffic Flow Under External Force</b> .....	74
<i>Battista, Anthony; Ni, Daiheng</i>	
<b>Understanding Issues in Airport Ground Access Modeling: Lessons from a Revealed Preference Study of New York Metropolitan Area Airports</b> .....	85
<i>Kisia, Duncan</i>	
<b>Cooperation Between Science and Aviation-Sector Service Providers in Europe for Risk Management of Volcanic Ash</b> .....	99
<i>Reichardt, Uta; Ulfarsson, Gudmundur F.; Petursdottir, Gudrun</i>	
<b>Author Index</b>	