

Motorcycles, Trucks, Buses, and Roundabouts

Transportation Research Record: Journal of the Transportation
Research Board Volume 2637 (2017)

ISBN: 978-1-5108-5440-6

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) 978-1-5108-5440-6
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

Safety Effects of Horizontal Curve Design on Motorcycle Crash Frequency on Rural, Two-Lane, Undivided Highways in Florida	1
<i>Xin, Chunfu; Wang, Zhenyu; Lin, Pei-Sung; Lee, Chanyoung; Guo, Rui</i>	
Investigating Total Annual Average Daily Traffic as a Surrogate for Motorcycle Volumes in Estimating Safety Performance Functions for Motorcycle Crashes	9
<i>Lyon, Craig; Persaud, Bhagwant; Himes, Scott</i>	
Evaluation of Roundabout-Related Single-Vehicle Crashes	17
<i>Burdett, Beau; Bill, Andrea R.; Noyce, David A.</i>	
Long-Term Effect of Universal Helmet Law Changes on Motorcyclist Fatal Crashes: Comparison Group and Empirical Bayes Approaches	27
<i>Lee, Jaeyoung; Abdel-Aty, Mohamed; Wang, Jung-Han; Lee, Chanyoung</i>	
Modeling Safety Effects of Horizontal Curve Design on Injury Severity of Single-Motorcycle Crashes with Mixed-Effects Logistic Model	38
<i>Xin, Chunfu; Wang, Zhenyu; Lee, Chanyoung; Lin Pei-Sung</i>	
Estimating Lives Saved and Injuries Reduced by Motorcycle Helmet Use in Colorado, 2006–2014	47
<i>Janson, Bruce N.</i>	
Heavy-Vehicle Crash Rate Analysis: Comparison of Heterogeneity Methods Using Idaho Crash Data	56
<i>Anderson, Jason; Hernandez, Salvador</i>	
Transfer of Training in Basic Control Skills from Truck Simulator to Real Truck	67
<i>Hirsch, Pierro; Choukou, Mohamed-Amine; Bellavance François</i>	
Numerical Study of Bernoulli Effect on Bus Controllability and Driving Safety	74
<i>Zhou, Hao; Wang, Lu; Cheng, Jianchuan; Ma, Yang</i>	
Short-Term Evaluation of Transition from Differential to Uniform Speed Limit for Trucks and Buses on Two-Lane Highways	83
<i>Hamzeie, Raha; Vafaei, Bijan; Kay, Jonathan J.; Savolainen, Peter T.; Gates, Timothy J.</i>	
Comparison of Driver Navigation at Turbo Roundabouts and Modern Two-Lane Roundabouts: Simulation Study	89
<i>Wankogere, Elisha Jackson; Kwigizile, Valerian; Oh, Jun-Seok; Ikononov, Pavel</i>	
Operational Evaluation of Two-Lane Roundabouts at Freeway Ramp Terminals: Comparison Between Roundabout and Signalized Interchanges	99
<i>Li, Zhixia; Chitturi, Madhav V.; Bill, Andrea R.; Noyce, David A.</i>	
Author Index	