



# **5<sup>th</sup> International Conference on Roundabouts**

*May 8-10, 2017  
Green Bay, Wisconsin*

**Organized by**  
Transportation Research Board

**Sponsored by**  
Standing Committee on Roundabouts (ANB75)

**Hosted by**  
Wisconsin State Department of Transportation  
University of Wisconsin - Madison

**Supported by**  
Federal Highway Administration

## WELCOME

Welcome to the fifth successful international roundabout conference by TRB's Roundabouts Committee, ANB75. On behalf of the Committee, we welcome to Green Bay attendees from a range of public and private organizations throughout the United States as well as many international delegates from several countries.

It has been very gratifying as Co-Chairs to see the strong interest shown in this conference, which has continually grown from an initial idea and efforts in 2002 to successful roundabout conferences in Vail (2005), Kansas City (2008), Carmel, IN (2011), and Seattle, WA (2014). The call for abstracts for this 2017 roundabout conference easily produced over 130 presentations on a range of topics and is another indication of the strong interest in all phases of roundabouts, both in the United States and worldwide. It is especially notable and indicative of the strong interest in roundabout issues in these tough economic times with travel budget restrictions. Many thanks to the hosts, planning members, and local logistics team for their hard work. And thanks to the TRB staff for their constant input and liaison efforts.

Thanks to the Federal Highway Administration our patrons for supporting this event, and the roughly 120 presenters and moderators who will make the conference one of the best ever, covering a wide variety of current roundabout intersection topics. To you all, a most warm welcome!

Finally, Wisconsin DOT staff and the local logistics team have made great efforts to enhance the program with a terrific bus tour program. We hope you take advantage of this unique opportunity.

May your conference experience be pleasant and rewarding.



Eugene R. (Gene) Russell, Sr.,  
TRB Roundabouts Committee Co-Chair  
Professor Emeritus of Civil Engineering  
Kansas State University



Brian Walsh  
TRB Roundabouts Committee Co-Chair  
Washington State Department of Transportation

## TRANSPORTATION RESEARCH BOARD

The **Transportation Research Board** is one of seven major programs of the National Academies of Sciences, Engineering, and Medicine. The mission of the Transportation Research Board is to increase the benefits that transportation contributes to society by providing leadership in transportation innovation and progress through research and information exchange, conducted within a setting that is objective, interdisciplinary, and multimodal. The Board's varied committees, task forces, and panels annually engage about 7,000 engineers, scientists, and other transportation researchers and practitioners from the public and private sectors and academia, all of whom contribute their expertise in the public interest. The program is supported by state transportation departments, federal agencies including the component administrations of the U.S. Department of Transportation, and other organizations and individuals interested in the development of transportation.

[www.TRB.org](http://www.TRB.org)

# Thank You Patrons

TRB sincerely appreciates the following organizations for their generous support of the Roundabout Conference

## GOLD

**SIDRA  
SOLUTIONS**

## SILVER



## BRONZE



## AGENDA AT A GLANCE

Sunday, May 7

2:00 p.m. – 6:00 p.m.	Registration	<i>KI Lobby South Counter</i>
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Monday, May 8

7:00 a.m. – 5:00 p.m.	Registration	<i>KI Lobby South Counter</i>
7:15 a.m. – 8:00 a.m.	<b>Continental Breakfast</b>	<i>KI Lobby</i>
8:00 a.m. – 9:00 a.m.	Opening Plenary Session	<i>Meeting Room B</i>
9:00 a.m. – 9:45 a.m.	<b>Break</b>	<i>KI Lobby</i>
	<b>Poster Session 1 Opens</b>	<i>KI Lobby West</i>
9:45 a.m. – 11:30 a.m.	<b>Breakout Sessions 2A, 2B, 2C</b>	
	2A - FHWA TOPR Research Updates	<i>Ballroom A1</i>
	2B - Trucks	<i>Ballroom A2</i>
	2C - Gap Analysis	<i>Ballroom A3</i>
11:30 a.m. – 1:00 p.m.	<b>Lunch with Speakers</b>	<i>Meeting Room B</i>
12:30 p.m. – 1:00 p.m.	<b>Poster Session 1 Continues - Presenters Available</b>	<i>KI Lobby West</i>
1:00 p.m. – 2:45 p.m.	<b>Breakout Sessions 3A, 3B, 3C</b>	
	3A- Synthesis and NCHRP Study SPF's	<i>Ballroom A1</i>
	3B - Environmental/Road Diets	<i>Ballroom A2</i>
	3C - Operations	<i>Ballroom A3</i>
2:45 p.m. – 3:15 p.m.	<b>Break</b>	<i>KI Lobby</i>
	<b>Poster Session 1 Continues - Presenters Available</b>	<i>KI Lobby West</i>
3:15 p.m. – 4:45 p.m.	<b>Breakout Sessions 4A, 4B, 4C</b>	
	4A - Safety	<i>Ballroom A1</i>
	4B - Design	<i>Ballroom A2</i>
	4C - Landscape/Artwork - Compare and Contrast	<i>Ballroom A3</i>
5:00 p.m. – 7:00 p.m.	<b>Reception with Patrons</b>	<i>Meeting Room B</i>

Tuesday, May 9		
7:30 a.m. – 4:00 p.m.	Registration	<i>KI Lobby South Counter</i>
7:15 a.m. – 8:00 a.m.	<b>Continental Breakfast</b>	<i>KI Lobby</i>
8:00 a.m. – 9:45 a.m.	<b>Breakout Sessions 5A, 5B, 5C</b>	
	5A - Pedestrians and Bicycles	<i>Ballroom A1</i>
	5B - Mini-Roundabouts	<i>Ballroom A2</i>
	5C - Capacity	<i>Ballroom A3</i>
9:45 a.m. – 10:15 a.m.	<b>Break</b>	<i>KI Lobby</i>
	<b>Poster Session 2 Opens</b>	<i>KI Lobby West</i>
10:15 a.m. – 11:45 a.m.	<b>Breakout Sessions 6A, 6B, 6C</b>	
	6A - State of the Agencies	<i>Ballroom A1</i>
	6B - Construction	<i>Ballroom A2</i>
	6C - Human Factors	<i>Ballroom A3</i>
11:45 a.m. – 1:00 p.m.	<b>Lunch</b>	<i>Meeting Room B</i>
12:30 p.m. – 1:00 p.m.	<b>Poster Session 2 Continues - Presenters Available</b>	<i>KI Lobby West</i>
1:00 p.m. – 2:45 p.m.	<b>Breakout Sessions 7A, 7B, 7C</b>	
	7A - Mini-Roundabouts	<i>Ballroom A1</i>
	7B - Modeling- Design Visualization	<i>Ballroom A2</i>
	7C - Intersection Control Evaluation (ICE) and Roundabouts	<i>Ballroom A3</i>
2:45 p.m. – 3:15 p.m.	<b>Break</b>	<i>KI Lobby</i>
	<b>Poster Session 2 Continues – Presenters Available</b>	<i>KI Lobby West</i>
3:15 p.m. – 4:45 p.m.  Buses will depart promptly at 3:15 p.m.	<b>Guided Roundabout Tour [Preregistration Required] Sessions 8A, 8B, 8C, 8D</b>	
	8A - Roundabouts for Trucks (includes general roundabouts tour plus stops at several sites where truck drivers are waiting)	<i>N Adams Street</i>
	8B - Roundabouts for Pedestrians (includes general roundabouts tour plus stops at several sites to observe/experience walking pedestrian traffic)	<i>N Adams Street</i>
	8C - Roundabouts for Bicyclists (includes general roundabouts tour plus stops at several sites to observe/experience bicycle traffic)	<i>Elm Street</i>
	8D - Roundabouts-only tour, no stops, to see as many as possible.	<i>Elm Street</i>
5:00 p.m. – 7:30 p.m.	<b>Lambeau Field Networking Reception</b> (Transportation provided)	<i>N Adams Street</i>

### Wednesday, May 10

7:00 a.m. – 10:00 a.m.	Registration	<i><b>KI Lobby South Counter</b></i>
7:15 a.m. – 8:00 a.m.	<b>Continental Breakfast</b>	<i><b>KI Lobby</b></i>
8:00 a.m. – 9:30 a.m.	<b>Breakout Sessions 9A, 9B, 9C</b>	
	9A -Law Enforcement Perspectives	<i><b>Ballroom A1</b></i>
	9B - International Perspectives	<i><b>Ballroom A2</b></i>
	9C - Data Collection and Analysis	<i><b>Ballroom A3</b></i>
9:30 a.m. – 9:45 a.m.	<b>Break</b>	<i><b>KI Lobby</b></i>
9:45 a.m. – 11:00 a.m.	<b>Breakout Sessions 10A, 10B, 10C</b>	
	10A - Outreach: Is Your Strategy Far-reaching?	<i><b>Ballroom A1</b></i>
	10B -Safety	<i><b>Ballroom A2</b></i>
	10C - Hot Topics - Hybrid	<i><b>Ballroom A3</b></i>
11:00 a.m. – 12:15 p.m.	Closing Plenary Session – Town Hall Roundabout Forum	<i><b>Meeting Room B</b></i>

### Guided Roundabout Tour

Tuesday, May 9

3:15 p.m. - 4:45 p.m.

(Preregistration Required)

Taking advantage of the great work done on roundabouts in Green Bay, during the afternoon of Tuesday May 9, four concurrent guided roundabout tours will take participants by bus to observe and experience local roundabouts. No additional registration fee is required, however, you must have registered in advance for the tour of your choice. Tickets will be issued with registration materials corresponding to the selected tour. No ticket transfer between tours will be permitted unless seats remain available after all ticketed participants have boarded. All options will include a general roundabout tour, with three of the four options including additional stops to sites for trucks, pedestrians, and bicycles.

## The Roundabout Committee

### Co-Chairs

Dr. Eugene Russell,  
Kansas State University

Mr. Brian Walsh  
Washington State Department of  
Transportation

### Secretary

Dr. Hillary Isebrands  
Federal Highway Administration

### Members

Ms. Melissa Anderson  
Cole Engineering

Ms. Janet Barlow  
Accessible Design for the Blind

Mr. Thomas Blust  
Road Commission for Oakland  
County

Mr. Keith Boddy  
NS Dept of Transportation and  
Infrastructure Renewal

Mr. James Brewer

Prof. Werner Brilon  
Ruhr University, Bochum

Mr. William Britnell  
Connecticut Department of  
Transportation

Mr. Jerome Champa  
California Department of Trans-  
portation

Mr. Richard Crossler-Laird  
Oregon Department of Transpor-  
tation

Mr. Philip Demosthenes  
Philip B. Demosthenes, LLC

Mr. Lambertus G.H. Fortuijn  
Delft University of Technology

Mr. James Foster  
Mobile County Engineering De-  
partment

Mr. Fred Hanscom

Mr. Mark Johnson  
MTJ Engineering, LLC

Mr. Mark Lenters  
Ourston - MSA

Mr. Michael Mastaglio  
Urban Engineers, Inc.

Dr. Kazunori Munehiro  
Civil Engineering Research  
Institute for Cold Region

Mr. Wade Odell  
Texas Department of Transporta-  
tion

Mr. Craig Parks  
Boone County, Indiana

Ms. Rachel Price  
Reid Middleton, Inc.

Mr. Colin Ridding  
Hatch Mott MacDonald

Mr. Cornell Robertson  
Franklin County Engineer

Mr. Lee Rodegerdts  
Kittelson & Associates, Inc.

Dr. Bastian Schroeder  
Kittelson & Associates, Inc.

Mr. Jeffrey Shaw  
Federal Highway Administration

Mr. Kenneth Sides  
Sam Schwartz Engineering

Mr. Daniel Spann  
Barge Waggoner Sumner &  
Cannon, Inc

Mr. Scott Zehngraft  
Georgia Department of Transpor-  
tation

Mr. Nathan Belz  
University of Alaska, Fairbanks

Mr. Alek Pochowski  
Kittelson & Associates, Inc.

Dr. Robert Rescot  
Applied Research Associates, Inc.

Dr. Katy Salamati  
SAS Institute

### TRB Staff

Bernardo Kliener  
Megan Burns  
Mary Kissi  
Freda Morgan  
Ted Jamela

**Sunday, May 7**

3:00 p.m. - 6:00 p.m., **KI Lobby South Counter**  
Registration

**Monday, May 8**

7:00 a.m. - 5:00 p.m., **KI Lobby South Counter**  
Registration

7:15 a.m. - 8:00 a.m., **KI Lobby**  
**Continental Breakfast**

8:00 a.m. - 9:00 a.m., **Meeting Room B**  
**Welcome and Opening Remarks**

**Welcome and Remarks from the TRB Roundabout Committee**

- Gene Russell, Emeritus Professor, Kansas State University, & Brian Walsh, Washington State DOT
- Jeffrey Shaw, Federal Highway Administration
- Bob Seitz, Deputy Secretary, Wisconsin DOT

9:00 a.m. - 9:45 a.m., **KI Lobby**  
**Break**

9:00 a.m. - 9:45 a.m., **KI Lobby West**  
**Poster Session 1 Opens – Presenters Available: See Page 15 for Full List of Poster Presenters**

9:45 a.m. - 11:130 a.m.  
**Breakout Sessions**

**Session 2A, Ballroom A1**  
**FHWA TOPR Research Updates**

*Moderator: Jeff Shaw, Federal Highway Administration*

**Evaluation of Rectangular Rapid Flashing Beacons at Multilane Roundabouts, Crosswalk Placement, and Environmental Characteristics**

Bastian Schroeder, Kittelson & Associates, Inc.

**Review of Fatal and Severe Injury Crashes and Evaluation of Geometric Parameters that Affect Truck Stability**

Hermanus Steyn, Kittelson & Associates, Inc.

**Update of Highway Capacity Manual Capacity Models and Evaluation of Traffic Control Device Effectiveness**

Lee Rodegerdts, Kittelson & Associates, Inc.

**Session 2B, Ballroom A2**  
**Trucks**

*Moderator: Bill Wondrachek, Wisconsin DOT*

**Trucking Industry Perspective of Roundabouts - Case 1, Case 2, and Case 3 Discovery**

Jay VonAhsen, MSA/Ourston

**Analysis of Capacity of a Roundabout Based on Observation Data regarding Traffic of Large Vehicles**  
Shusei Yasui, National Institute for Land and Infrastructure Management, MLIT, Japan

**Driving behavior of large vehicles in the roundabout of snow conditions**  
Kazunori Munehiro, CERI

**Session 2C, Ballroom A3**  
**Gap Analysis**

*Moderator: Mark Lenters, MSA/Ourston*

**Effects of Presence of Vehicles in Adjacent Entry Lane on Gap Acceptance Behavior at Roundabouts with Two-Lane Entry**  
Chris Lee, University of Windsor

**Critical Gaps and Follow-up Headways at Congested Roundabouts**  
Beau Burdett, UW-Madison TOPS Lab

**University Avenue Roundabout Corridor - San Diego**  
Phil Rust, City of San Diego

11:30 a.m. - 1:00 p.m., **Meeting Room B**  
**Lunch with Speakers**

- Randy Asman and Paul Vraney, Wisconsin DOT
- David Noyce, University of Wisconsin - Madison
- Conference Gold Patrons

12:30 p.m. - 1:00 p.m., **KI Lobby West**  
**Poster Session 1 (page15) Continues – Presenters Available**

1:00 p.m. - 2:45 p.m.  
**Breakout Sessions**

**Session 3A, Ballroom A1**  
**Synthesis and NCHRP Study SPF's**

*Moderator: David Henkel, CHA Consulting, Inc.*

**NCHRP Project 17-70 Development of Roundabout Crash Prediction Models and Method**  
Nick Foster, Kittelson & Associates, Inc.

**NCHRP Synthesis Report 488: Roundabout Practices**  
Alek Pochowski, Kittelson & Associates, Inc.

**Session 3B, Ballroom A2**  
**Environmental/Road Diets**

*Moderator: Mark Lenters, MSA/Ourston*

**Complete Streets + Complete Intersections = Complete Networks**  
Ken Sides, Sam Schwartz Engineering

**Roundabout Selected For Intersection? – Halfway to Road Diet Decision**  
Brian Walsh, Washington State DOT

**Session 3C, Ballroom A3**  
**Operations**

*Moderator: Rebecca Szymkowski, Wisconsin DOT*

**Comparing Ramp Terminal Roundabouts with Diverging Diamond Interchanges**  
Gilbert Chlewicki, Advanced Transportation Solutions

**Survive The Guide, SR 539 - The Tale of Two Case Studies**  
Dina Swires, Washington State Department of Transportation

**A Deterministic Method of Evaluating Speeds for the Fastest Path Analysis at Roundabouts**  
Hannah Khosravi, Transoft Solutions

2:45 p.m. - 3:15 p.m., **KI Lobby**  
**Break**

2:45 p.m. - 3:15 p.m., **KI Lobby West**  
**Poster Session 1 (page 15) Continues – Presenters Available**

3:15 p.m. - 4:45 p.m.  
**Breakout Sessions**

**Session 4A, Ballroom A1**  
**Safety**

*Moderator: Brian Porter, Wisconsin DOT*

**Crash Modification Factors Based on Crash Histories of 151 Modern Roundabouts in Five States**  
Wei Zhang, Federal Highway Administration

**Statewide Roundabout Safety Analysis**  
Andrea Bill, UW-Madison TOPS Lab

**Comparisons of Changes in Melbourne of Pedestrian and Cyclist Crashes at Roundabouts and Signals Over Time**  
Andrew O'Brien, O'Brien Traffic

**Session 4B, Ballroom A2**  
**Design**

*Moderator: Rodney Taylor, Wisconsin DOT*

**Design Principles for Safety and Operations of Multi-Lane Roundabouts**  
Mark Johnson, MTJ Roundabout Engineering

**Reed Market/15th Street Roundabout Project**  
Bradley Shea, HDR

**Modular Mini-Roundabouts from Recycled Plastic**  
Jerry Fanucci, ZKxKZ LLC

**Session 4C, Ballroom A3**

**Landscape/Artwork - Compare and Contrast**

*Moderator: Michael Mastaglio, Urban Engineers, Inc.*

- Bill McNary, Wisconsin DOT
- Ken Sides, Sam Schwartz Engineering

5:00 p.m. - 7:00 p.m., **Meeting Room B**  
**Reception with Patrons**

## Tuesday, May 9

7:00 a.m. - 4:00 p.m., **KI Lobby South Counter**  
Registration

7:30 a.m. - 8:00 a.m., **KI Lobby**  
**Continental Breakfast**

8:00 a.m. - 9:45 a.m.,  
**Breakout Sessions**

### **Session 5A, Ballroom A1** **Pedestrians and Bicycles**

*Moderator: Paul Vraney, Wisconsin DOT*

**Analysis on traffic safety for pedestrian and cyclists at roundabouts in Japan**  
Koji Suzuki, Nagoya Institute of Technology

**Belmont University: A Case Study of Roundabout Operational Recovery following acute Pedestrian (Student) Saturation**  
Brandon Taylor, RPM Transportation Consultants, LLC.

**Operations and Safety of Separated Bicycle Facilities at Single Lane Roundabouts**  
David Stanek, Fehr & Peers

### **Session 5B, Ballroom A2** **Mini-Roundabouts**

*Moderator: Dina Swires, Washington State DOT*

**Mini-Roundabouts in Washington State**  
Dan Dovey, King County Department of Transportation, Road Services Division

**Mini-Roundabouts in Delaware: Designing to Context**  
Shilpa Mallem, T.Y. Lin International

**Mini-Roundabouts Before and After Successful Case Studies**  
Ahmed Amer, VHB

### **Session 5C, Ballroom A3** **Capacity**

*Moderator: Josh Straka, Strand Associates*

**An assessment of the updated Highway Capacity Manual roundabout capacity model**  
Rahmi Akcelik, Akcelik & Associates (SIDRA SOLUTIONS)

**A Comparison of two roundabout capacity models**  
Elżbieta Macioszek, Silesian University of Technology

**Roundabout Capacity Analysis Based on Conflict Technique**  
Werner Brilon, Ruhr-University Bochum

9:45 a.m. - 10:15 a.m., **KI Lobby**  
**Break**

9:45 a.m. - 10:15 a.m., **KI Lobby West**  
**Poster Session 2 Opens – Presenters Available: See Page 16 for Full List of Poster Presenters**

10:15 a.m. - 11:45 a.m.,

## **Breakout Sessions**

### **Session 6A, Ballroom A1**

#### **State of the Agencies**

*Moderator: Jerry Zogg, Wisconsin DOT*

#### **The Evolution of Roundabout Implementation in Georgia**

Scott Zehngraff, Georgia DOT

#### **Washington State DOT Roundabout Implementation Over Two Decades**

Brian Walsh, Washington State DOT

#### **Road Commission for Oakland County, Michigan – Challenges, Experience and Lessons Learned**

Tom Blust, Road Commission for Oakland County

### **Session 6B, Ballroom A2**

#### **Construction**

*Moderator: Eric Gwidt, Wisconsin DOT*

#### **Reconstructing a Six-Leg Intersection into Mohave County's First Roundabout**

Steven Latoski, Mohave County (Arizona) Public Works

#### **Construction of Diamond I-5/La Center Interchange with Multilane Roundabout Ramp Terminals**

Jeff Whitman, Kittelson & Associates, Inc.

#### **Alum Creek Drive at Groveport Road – Flyover Bridge with Double Roundabouts**

William Crosier, Franklin County Engineer's Office

### **Session 6C, Ballroom A3**

#### **Human Factors**

*Moderator: Mark Johnson, MTJ Roundabout Engineering*

#### **Analysis of drivers' eye movement on snow-covered roundabouts**

Kazunori Munehiro, Civil Engineering Research Institute for Cold Region, PWRI, Japan

#### **Non-Geometric Solutions to Driver Errors and Multi-Lane Roundabouts**

Phil Weber, GHD

#### **Development of the Crossover Roundabout**

Ryan Hale, Missouri Department of Transportation

11:45 a.m. - 1:00 p.m., **Meeting Room B**

## **Lunch**

12:30 p.m. - 1:00 p.m., **KI Lobby West**

**Poster Session 2 (page 16) Continues – Presenters Available**

1:00 p.m. - 2:45 p.m.,

## **Breakout Sessions**

### **Session 7A, Ballroom A1**

#### **Mini-Roundabouts**

*Moderator: Ahmed Amir, VHB*

- Wei Zheng, Federal Highway Administration
- Dina Swires, Washington State Department of Transportation
- Mark McCullough, Washtenaw County Road Commission

**Session 7B, Ballroom A2**

**Modeling- Design Visualization**

*Moderator: Randy Johnson, DKS Associates*

**The Visualization of Roundabouts from Concept to Creation**

Kurt Stiles, Washington State DOT

**Design Visualization Techniques, Methods and Case Studies**

Steven Theisen, Wisconsin DOT and Nathan Cook, MSA/Ourston

**Session 7C, Ballroom A3**

**Intersection Control Evaluation (ICE) and Roundabouts**

*Moderator: Steve Pyburn, Federal Highway Administration*

**Caltrans Intersection Control Evaluation Policy**

Richard Stone, California DOT

**ICE Age**

Kamesh Vadula, Omni-Means, Inc and Jerry Champa, California DOT

**Wisconsin DOT Intersection Control Evaluation Policy**

Kevin Scopoline, Wisconsin Department of Transportation

2:45 p.m. - 3:15 p.m., **KI Lobby**

**Break**

2:45 p.m. - 3:15 p.m., **KI Lobby West**

**Poster Session 2 (page 16) Continues – Presenters Available**

3:15 p.m. - 4:45 p.m.,

**Guided Roundabout Tour – Ticket Required** (*Buses will depart promptly at 3:15 p.m.*)

8A - Roundabouts for Trucks (includes general roundabouts tour plus stops at several sites where truck drivers are waiting) - **N Adams Street**

8B - Roundabouts for Pedestrians (includes general roundabouts tour plus stops at several sites to observe/experience walking pedestrian traffic) - **N Adams Street**

8C - Roundabouts for Bicyclists (includes general roundabouts tour plus stops at several sites to observe/experience bicycle traffic) - **Elm Street**

8D - Roundabouts-only tour, no stops, to see as many as possible. - **Elm Street**

5:00 p.m. - 7:30 p.m., **N Adams Street**

**Lambeau Field Networking Reception** (*Transportation provided*)

**Wednesday, May 10**

7:00 a.m. - 10:00 a.m., **KI Lobby South Counter**  
Registration

7:15 a.m. - 8:00 a.m., **KI Lobby**  
**Continental Breakfast**

8:00 a.m. - 9:30 a.m.,  
**Breakout Sessions**

**Session 9A, Ballroom A1**  
**Law Enforcement Perspectives**

*Moderator: Rick Olig, Olig Consulting, LLC.*

- Chief Derek Beiderwieden, De Pere Police Department
- Sergeant Daniel S. Diedrich, Motor Carrier Enforcement, Wisconsin State Patrol- Northeast Region
- Lieutenant Karl D. Ackermann, Police Operations, Green Bay Police Department

**Session 9B, Ballroom A2**  
**International Perspectives**

*Moderator: Victor Salemann, Transportation Solutions, Inc.*

**Roundabouts in Germany and Switzerland 2017**  
Werner Brilon, Ruhr University, Bochum

**Canada**  
Steve van De Keere, Region of Waterloo Transportation and Environmental Services Department

**Sustainable Safety as the Theoretical Basis of Roundabouts in Netherlands**  
Bertus Fortuijn, Delft University of Technology

**Session 9C, Ballroom A3**  
**Data Collection and Analysis**

*Moderator: Rachel Price, Reid Middleton*

**Monitoring Driver Adaptation to Multilane Roundabouts with Drones: A Case Study**  
Eric Hildebrand, University of New Brunswick

**Modeling capacity of roundabout system from an innovative perspective**  
Yuzhou Duan, Henan University of Technology

**Conducting Sensitivity Analyses for Confident Roundabout Lane Configurations**  
Christina Barry, Georgia Department of Transportation

9:30 a.m. - 9:45 a.m., **KI Lobby**  
**Break**

9:45 a.m. - 11:00 a.m.,  
**Breakout Sessions**

## **Session 10A, Ballroom A1**

### **Outreach: Is Your Strategy Far-reaching?**

*Moderator: William Britnell, Connecticut DOT*

- Randy Asman, Wisconsin DOT
- Mark Cantola, Wisconsin DOT
- Doug Wiersig, City of Fort Worth
- Mark McCulloch, Washtenaw County Road Commission

## **Session 10B, Ballroom A2**

### **Safety**

*Moderator: Phil Demosthenes, Philip B. Demosthenes, LLC*

#### **Reducing Crashes through Low Cost Improvements at an Urban Multi-Lane Roundabout**

Samuel Bobko, Hatch Mott MacDonald

#### **Statistical Analysis of Roundabout Safety Based Upon Crash and Geometric Properties in the States of New Jersey and Pennsylvania**

Sean Coffey, Villanova University

#### **Roundabout Crash Trends in Victoria, Australia: A Review and Comparison to International Experience**

Toby Cooper, Australian Institute of Traffic Planning and Management

## **Session 10C, Ballroom A3**

### **Hot Topics - Hybrid**

*Moderator: Andrea Bill, Traffic Operations and Safety (TOPS) Laboratory University of Wisconsin-Madison*

#### **Implementation of Roundabouts in our National Parks and Federal Lands**

Hillary Isebrands, Federal Highway Administration

#### **Roundabout Innovation for Oversized Loads**

Robert Jack, Strand Associates

#### **Guidelines for Accessibility of Modern Roundabouts to Assist Pedestrians with Vision Disabilities**

Bastian Schroeder, Kittelson and Associates, Inc.

#### **Where is Your Speed Control?**

Amanda DeAmico, MSA/Ourston

#### **Adaptive Roundabout Projects**

Rachel Price, Reid Middleton Inc.

11:00 a.m. - 12:15 p.m., **Meeting Room B**

### **Closing Plenary Session**

#### **Town Hall Roundabout Forum**

Attendee Input on Where We Go From Here: Research, Outreach, and Committee Direction

- **Unique Use Of Roundabout Under A Highway Structure**, *Joshua Straka, Strand Associates*
- **The Northwestern Connector Triangle Project: Modeling and Right-Sizing a High-Capacity Roundabout in Oakland County, Michigan**, *John Katers, OHM Advisors*
- **North America's Largest Roundabout Project - 47 Multilane Roundabouts**, *Mark Lenters, MSA/Ourston*
- **Automated Analysis of Undesirable Driver Behaviors in Two-Lane Roundabouts**, *Gordon Parikh, University of Minnesota - Minnesota Traffic Observatory*
- **GPCID Traffic Circle**, *Jonathan DiGioia, AECOM*
- **3D Design Modeling Software Comparison for Roundabouts**, *Matthew Hamel, DLZ National, Inc.*
- **Flanders Avenue Interchange Planning and Procurement (Calgary Alberta's First Multi-Lane Roundabout Interchange)**, *David Breu, ISL Engineering and Land Services Ltd.*
- **Smythe Street Roundabout - Fredericton, NB, Canada**, *Jon Lewis, City of Fredericton, New Brunswick*
- **Mini-Roundabout Replacement of Signalized Intersections: Planning, Design, Public Involvement, and Lessons Learned**, *Bryan Nemeth, Bolton & Menk*
- **First Mini-Roundabout in Rhode Island**, *Amphone Soupharath, VHB*
- **A comparison of Operational Characteristics of Roundabout, Traditional Diamond and Diverging Diamond Freeway Interchange Treatments**, *Rahmi Akcelik, Akcelik & Associates (SIDRA SOLUTIONS)*
- **Maine's Statewide Experience in Using Roundabouts to Improve Intersection Safety**, *Edward Hanscom, Maine Department of Transportation*
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## *Notes*

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