

4th

International Conference on Roundabouts

April 16-18, 2014

Sheraton Seattle Hotel

Seattle, Washington

PRELIMINARY PROGRAM

TRANSPORTATION RESEARCH BOARD

OF THE NATIONAL ACADEMIES

AGENDA AT A GLANCE

Time	Registration	Registration	Sessions	Posters
	Tuesday, April 15		Wednesday, April 16	
7:00-7:15 AM		Registration Open		
7:15-7:30 AM			Continental Breakfast	Poster Session 1 Setup
7:30-7:45 AM				
7:45-8:00 AM				
8:00-8:15 AM				
8:15-8:30 AM				
8:30-8:45 AM				
8:45-9:00 AM				
9:00-9:15 AM				
9:15-9:30 AM				
9:30-9:45 AM				
9:45-10:00 AM				
10:00-10:15 AM				
10:15-10:30 AM				
10:30-10:45 AM				
10:45-11:00 AM				
11:00-11:15 AM				
11:15-11:30 AM				
11:30-11:45 AM				
11:45 AM-12:00 PM				
12:00-12:15 PM	Registration Open			
12:15-12:30 PM				
12:30-12:45 PM				
12:45-1:00 PM				Poster Session 1 Presenters Available
1:00-1:15 PM				
1:15-1:30 PM				
1:30-1:45 PM				
1:45-2:00 PM				
2:00-2:15 PM				
2:15-2:30 PM				
2:30-2:45 PM				
2:45-3:00 PM				
3:00-3:15 PM				
3:15-3:30 PM				
3:30-3:45 PM				
3:45-4:00 PM				
4:00-4:15 PM				
4:15-4:30 PM				
4:30-4:45 PM				
4:45-5:00 PM				
5:00-5:15 PM				
5:15-7:30 PM			Reception With Patrons	

AGENDA AT A GLANCE

Time	Registration	Sessions	Posters	Tours	Registration	Sessions	
	Thursday, April 17				Friday, April 18		
7:00-7:15 AM	Registration				Registration		
7:15-7:30 AM	Open	Continental Breakfast	Poster Session 2 Setup		Open	Continental Breakfast	
7:30-7:45 AM							
7:45-8:00 AM							
8:00-8:15 AM		Breakout Sessions 5A, 5B, 5C				Breakout Sessions 9A, 9B, 9C	
8:15-8:30 AM							
8:30-8:45 AM							
8:45-9:00 AM							
9:00-9:15 AM							
9:15-9:30 AM							
9:30-9:45 AM							
9:45-10:00 AM		Break	Poster Session 2 Presenters Available			Guided Roundabout Tour \$25 Addition Registration Required	Breakout Sessions 10A, 10B, 10C
10:00-10:15 AM							
10:15-10:30 AM		Breakout Sessions 6A, 6B, 6C					
10:30-10:45 AM							
10:45-11:00 AM							
11:00-11:15 AM						Closing Session (11) Town Hall Roundabout Forum	
11:15-11:30 AM							
11:30-11:45 AM							
11:45 AM-12:00 PM							
12:00-12:15 PM	Lunch						
12:15-12:30 PM							
12:30-12:45 PM		Poster Session 2 Presenters Available					
12:45-1:00 PM							
1:00-1:15 PM	Breakout Sessions 7A, 7B, 7C						
1:15-1:30 PM							
1:30-1:45 PM							
1:45-2:00 PM							
2:00-2:15 PM							
2:15-2:30 PM							
2:30-2:45 PM							
2:45-3:00 PM	Break	Poster Session 2 Presenters Available					
3:00-3:15 PM							
3:15-3:30 PM	Breakout Sessions 8A, 8B, 8C	Poster Session 2 Takedown					
3:30-3:45 PM							
3:45-4:00 PM							
4:00-4:15 PM							
4:15-4:30 PM							
4:30-4:45 PM							

Preliminary Conference Agenda

Tuesday, April 15

12:00 PM – 5:00 PM

Registration

Wednesday, April 16

7:00 AM – 5:00 PM

Registration

7:15 AM – 8:00 AM

Breakfast

8:00 AM – 9:00 AM

Opening Plenary Session

1) Welcome and Opening Remarks

Brian Walsh, Washington State DOT & International Roundabout Conference Planner

Gene Russell, Emeritus Professor, Kansas State University & TRB Roundabout Committee Chair

Mike Griffith, FHWA Office of Safety, Washington, DC

Lynn Peterson, Secretary of Transportation, Washington State DOT

9:00 AM – 9:45 AM

Break

Poster Session 1 Opens – *Presenters Available*

9:45 AM – 11:30 AM

Breakout Sessions

2A) Metering and Other Operational Considerations for Roundabouts

Moderator: TBD

Presenters

- Bastian Schroeder, ITRE at N.C. State University, *SuperCircles: Using a Part-Time Entry Signal to Create All-Day Operational and Safety Benefits at Intersections*
- L.G.H. (Bertus) Fortuijn, Delft University of Technology, The Netherlands, *Robustness of Roundabout Metering Systems (RMS)*

- A. Maria Salomons, Delft University of Technology, The Netherlands, *Optimizing the Traffic Control of Signalized Turbo Circles*
- Bill Baranowski, RoundaboutsUSA, *Roundabouts Located Near Traffic Signals*

2B) Evaluation Elements of Roundabout Intersection Choices

Moderator: TBD

Presenters

- Michelle Stevens, Felsburg Holt & Ullevig, *Blending a Roundabout into an Art District in Lakewood, Colorado*
- Koji Suzuki, Nagoya Institute of Technology, Japan, *Subjective Evaluation for Driving Conditions at Roundabout by Before-After Analysis*
- Brian Ray, Kittelson & Associates, Inc., *Intersection Control Evaluation Implementation*
- Diego Fernandes Neris, University of Sao Paulo, Brazil, *An Adaptation of Roundabouts Operation for High-Volume Traffic Conditions*

2C) Driver and Other User Behavior Relationship to Capacity/Safety

Moderator: TBD

Presenters

- Michael Hunter, Georgia Institute of Technology, *Georgia Roundabout Model Calibration*
- Kun Zhang, DPTI, Government of South Australia, *An Innovative Dual Roundabout - Design Drives Behaviour Change*
- Nathan Belz, University of Alaska – Fairbanks, *Cellular Automata and the Influence of Driver Behavior at Roundabouts*
- Hiroyuki Kageyama, Civil Engineering Research Institute, Japan, *Driving Behavior Analysis at Roundabouts under Snowy and Dry Road Conditions*

11:30 AM – 1:00 PM

Lunch

12:30 PM – 1:00 PM

Poster Session 1 Continues – Presenters Available

1:00 PM – 2:45 PM

Breakout Sessions

3A) Constructing Roundabouts, Work Zone Design and the Use of Temporary Roundabouts

Moderator: TBD

Presenters

- Kevin House, Parametrix, Inc., *Lessons in Scripting the Construction Sequencing Dance*
- Jennifer Atkinson, Leidos, *Temporary Traffic Control for Building and Maintaining Single and Multi-Lane Roundabouts*

- Nathan Beauheim, City of Cheyenne, Wyoming, *Constructing the Pershing / Converse / 19th Roundabout in the Middle of Cheyenne, Wyoming*
- Shane King, Olsson Associates, *Temporary Roundabout in Work Zone*
- Jay VonAhsen, Kimley-Horn and Associates, Inc., *Recent Challenges with Modern Roundabout Construction*

3B) Unique Roundabout Applications - Case Studies PART 1

Moderator: TBD

Presenters

- Daniel Spann, RPM Transportation Consultants, LLC, *A Case Study of the Music Row Roundabout in Nashville, Tennessee*
- David A. Henkel, CHA Consulting, Inc., *Heading Home - The Story of the US 31 Mega-Project*
- Alan Woodmansey, FHWA, Montana Division, *Montana's Roundabout Corridor: Convincing the Stakeholders and Ourselves*
- Christopher Tiesler, Kittelson & Associates, Inc., *Gilberts Corner (US 50 / US 15) Roundabout Retrofit*
- Becky Bucar & Dan Wilkins, Town of Truckee, California, *Policies, Planning and Strategies to Fund Roundabouts*

3C) Safety: From HSM and State Safety Summaries of North America to Context for Needed Illumination

Moderator: TBD

Presenters

- Clayton Rudy, McElhanney Consulting Services Ltd., *Long-term Trends in Safety Performance at Roundabouts*
- Andrea Bill, University of Wisconsin-Madison, *Safety Evaluation of Wisconsin Roundabouts*
- Franklin Gbologah, Georgia Institute of Technology, *Evaluation of Roundabout Illumination and Safety*
- Andrew Duerr, GHD Inc., *Statewide Roundabout Implementation Using the HSM Implementation Plan as a Model*

2:45 PM – 3:15 PM

Break

Poster Session 1 Continues – Presenters Available

3:15 PM – 4:45 PM

Breakout Sessions

4A) Truck Accommodations / Considerations at Roundabouts

Moderator: TBD

Presenters

- Anabele Lindner, University of Sao Paulo, Brazil, *Traffic and Safety Compatibility of LCV in Modern Roundabouts*

- Amanda Ruksznis, Reid Middleton, Inc., *Trucks and Roundabouts: Friends or Foes?*
- Scott Ritchie, Roundabouts & Traffic Engineering, *Accommodating Trucks at Multi-Lane Roundabouts*
- Ranjit Godavarthy, Great Plains Transportation Institute, NDSU, *Accommodating Oversize Overweight Vehicles at Roundabouts*

4B) Larger Policy, Planning, and Design Aspects of Roundabouts

Moderator: TBD

Presenters

- Phil Rust, Ada County Highway District, Idaho, *Greasing the Skids and Shifting into Overdrive*
- Michael MacDonald, Hatch Mott MacDonald, *Development of the Canadian Roundabout Design Guide*
- Mark T. Johnson & Ken Sides, MTJ Engineering, LLC & City of Clearwater, Florida, *Implications of Modern Roundabouts for Communities and Roadway Planning Standards*
- Frank Broen, Certified Roundabout Champions, *Certified Roundabout Champions*

4C) Micro-Simulation Studies on Existing Roundabouts – Calibration and Modeling 3D

Moderator: TBD

Presenters

- Sewa Ram, School of Planning and Architecture, New Delhi, India, *Performance Indices for Roundabouts in Heterogeneous Traffic Conditions*
- Sean Riley & Matt Hamel, DLZ Corporation, *Roundabout 3D Modeling*
- Amphone Soupharath, Vanasse Hangen Brustlin, Inc., *Integrating RSAs and 3-D Visualization Tools to Enhance Roundabout Design Process*

5:30 PM – 7:00 PM

Reception with Patrons

Thursday, April 17

7:00 AM – 4:00 PM

Registration

7:15 AM – 8:00 AM

Breakfast

8:00 AM – 9:45 AM

Breakout Sessions

5A) Pedestrian Design, Accessibility, and Driver Yielding Studies in the U.S. and Other Countries

Moderator: TBD

Presenters

- Bastian Schroeder, ITRE at N.C. State University, *NCHRP 3-78b Project Overview and Status - A Look Ahead at National Guidance for Making Roundabouts Accessible to Pedestrians Who are Blind*
- Hidekatsu Hamaoka, Akita University, Japan, *Comparison of the Head-Turning Behavior of Pedestrians in Japan*
- Janet M. Barlow, Accessible Design for the Blind, *Roundabouts and Pedestrians who are Visually Impaired*
- Katy Salamati, ITRE at N.C. State University, *A Cross-Cultural Study of Driver Yielding Behavior to Pedestrians at Roundabouts: An American-Portuguese Comparison*
- Wes Butch & Jeffrey S. Bagdade, DLZ National, Inc. & Opus International Consultants, *Modeling PHB's Using VISSIM at the Fuller Road Roundabout*

5B) Agency Policy Development for Roundabouts

Moderator: TBD

Presenters

- Andy Boenau & Chris Tiesler, Timmons Group & Kittelson & Associates, Inc., *Developing Statewide Roundabout Guidance in Virginia*
- Martin Héту, WSP Canada Inc., *Current Situation of Roundabouts in the Province of Quebec*
- Andrew Cibor, Ada County Highway District, Idaho, *Countywide Roundabout Right-of-Way Preservation Plan*
- Justin Bansen & Frank Sullivan, Kittelson & Associates, Inc. & Florida DOT, *Roundabouts in Florida: A 2014 Update*
- Brian Walsh, Washington State DOT, *Washington State DOT's Roundabout Program - A Chronological Timeline of Successful Intersection Implementation*

5C) Modeling Capacity, Calibrating, Performance and Operational Evaluation of Roundabouts – Individual Intersections and Corridors

Moderator: TBD

Presenters

- Andrea Bill, University of Wisconsin-Madison, *Operational Evaluation of Roundabouts at Ramp Terminals*
- Majed Al-Ghandour, NCDOT, *Experimental Analysis with a Scramble Large Volume of Pedestrians in Single-Lane Roundabout Slip Lane*
- Lee A. Rodegerdts, Kittelson & Associates, Inc., *Overview of NCHRP 03-100: Evaluating Performance of Roundabouts in Corridors*
- Andrea Bill, University of Wisconsin-Madison, *Comprehensive and Numerical Calibration Guideline for VISSIM Roundabout Models*
- Wang Weiqi, Beijing University of Technology, China, *Exploration on Capacity Estimation of Roundabouts of Beijing, China*

9:45 AM – 10:15 AM

Break

Poster Session 2 Opens – *Presenters Available*

10:00 AM – 11:45 AM

Guided Roundabout Tour – *Separate Registration Required*

10:15 AM – 11:45 AM

Breakout Sessions

6A) International Perspectives – Roundabout Intersections

Moderator: TBD

Presenters

- Werner Brilon, Ruhr-University Bochum, Germany, *Roundabouts: A State of the Art in Germany*
- Keith Boddy, Nova Scotia Transportation & Infrastructure Renewal, Canada, *Canadian Roundabouts - Practice Review*
- Hideki Nakamura, Nagoya University, Japan, *The State of the Art of Roundabout Implementation in Japan*
- Howard McCulloch, NE Roundabouts, *Status of Roundabouts in New York State*

6B) Bicycle Design, Path Tendencies, and Accommodation of Vulnerable Users

Moderator: TBD

Presenters

- Rachel Price, Reid Middleton, *Bike Lane Ends...Now What?*
- Hiroshi Kobayashi, National Institute for Land and Infrastructure Management, Japan, *Experimental Validation of Appropriate Bicycle Traveling Method in Urban Roundabouts*
- Brad Shea, HDR Engineering, *Pedestrian and Bicycle Accommodation at Roundabouts*
- Colin Ridding, Mott MacDonald, *Vulnerable Road Users at Roundabouts in the UK*

6C) Accelerating Roundabout Implementation in the United States – FHWA TOPR 34

Moderator: TBD

Presenters

- Lee A. Rodegerdts, Kittelson & Associates, Inc., *Reassessment of Roundabout Capacity Models for the Highway Capacity Manual*
- Katy Salamati & Nagui Roupail, ITRE at N.C. State University, *Assessment of the Environmental Characteristics of Roundabouts*
- Bastian Schroeder, ITRE at N.C. State University, *Evaluation of Rectangular-Rapid-Flashing Beacons (RRFBs) at Multilane Roundabouts*

- Hermanus J. Steyn, Kittelson & Associates, Inc., *Safety - Fatal and Injury Crash Evaluation in the US*

11:45 AM – 1:00 PM

Lunch

12:30 PM – 1:00 PM

Poster Session 2 Continues – Presenters Available

1:00 PM – 2:45 PM

Breakout Sessions

7A) Turbo Roundabouts and Unconventional Geometry Roundabouts

Moderator: TBD

Presenters

- Bill Baranowski, RoundaboutsUSA, *Turbo Roundabout Design? - Redesign of Park City's 14 Year Old Deer Valley Roundabout*
- Tim Murphy, Delcan Corporation, *The Turbo Roundabout, A First in Canada*
- Radoslaw Bak, Cracow University of Technology, Poland, *Operational Problems and Capacity Analysis of Turbo Roundabouts – Polish Experiences*
- Steven Chan, Transoft Solutions Inc., *Design Vehicle's Influence to the Geometric Design of Turbo Roundabouts*
- Tomaz Tollazzi, University of Maribor, Slovenia, *Alternative Types of Roundabouts*

7B) Organizational Structure for Delivering Innovative Roundabouts

Moderator: TBD

Presenters

- Dina Swires, Washington State DOT, *Conceptual Design & Internal Traffic Design Process for Intersection Choice*
- Chris Damitio, Washington State DOT, *Project Development, Public Input & Delivery from a Design and Construction Project Engineer Perspective*
- Kurt Stiles, Washington State DOT, *Visual Communications (Design Visualization) During Project Development Stage*
- Brian Walsh, Washington State DOT, *The Road to Sustain Success and Project Concurrence*

7C) Various Models/Tools that Support Roundabout Choice in Design, Environmental, and Network Arenas

Moderator: TBD

Presenters

- Antonio Pratelli, University of Pisa, Italy, *Unconventional Roundabout Geometry for Large Vehicles or Space Constraints*
- Rahmi Akcelik, SIDRA SOLUTIONS, *Recalibration of a Vehicle Power Model for Fuel and Emission Estimation and its Effect on Assessment of Alternative Intersection Treatments*

- Kazunori Munehiro, CERI, Japan, *Driving Behavior and Travel Path of Semi-Trailer on Roundabout*
- Sepideh Eshragh, Iowa State University, *Network Performance Improvement During Hurricane Evacuation Using Roundabouts*

2:45 PM – 3:15 PM

Break

Poster Session 2 Continues – *Presenters Available*

3:15 PM – 4:45 PM

Breakout Sessions

8A) Mini-Roundabouts

Moderator: TBD

Presenters

- Michael A. Gingrich Sr., Alternative Intersection Control, *Origins, Applications, and Examples of Double Mini Roundabouts*
- Wei Zhang, FHWA, *Mini-roundabout Case Studies*
- Scott Ritchie, Roundabouts & Traffic Engineering, *FHWA Mini Roundabout Study*
- Marko Rencelj, University of Maribor, Slovenia, *Slovenian Experiences with Mini Roundabouts and Assembled Roundabouts*

8B) Unique Roundabout Applications – Case Studies PART 2

Moderator: TBD

Presenters

- Joseph C. Balskus, Tighe & Bond, *Modern Roundabouts in CT - An Engineering Journey*
- Tatsuo Takase, Shinshu University, Japan, *Report on Pilot Project of Roundabout in Karuizawa Roppontsuji*
- Kenneth Voigt, Ayres Associates, *Challenges of Constructing Cheyenne's First Dual Lane Five-Leg Roundabout*

8C) Design Checks and Validation

Moderator: TBD

Presenters

- Patrick McGrady, Reid Middleton, *Roundabout Relationships: Validating Your Design*
- Michael J. Wallwork, Alternate Street Design, PA, *Improving Roundabout Designs*
- Mark Lenters, GHD Inc., *Geometric Design Heuristics for Modern Roundabouts*

Friday, April 18

7:00 AM – 10:00 AM

Registration

7:15 AM – 8:00 AM

Breakfast

8:00 AM – 9:30 AM

Breakout Sessions

9A) Citizen Activism, Engineering Outreach, and Elected Official Perspectives

Moderator: TBD

Presenters

- Jeannette Taylor, Jacobs Engineering, *Built It and They Will Come - Woodinville Tourist District Roundabouts*
- Rod Warner, US41Momentum, *Getting to "Want-It-NOW!" from "No-Way"*
- Joseph T. "Jody" Short, Lee Engineering, *An Elected Official's Experience with Roundabouts*
- Robert Dell-Ross, City of Roswell, Georgia, *Lessons Learned from Roswell's First Modern Roundabout*

9B) Evolution of Roundabout Practice in the United States – A Conversational Panel with Audience Participation

Moderator: TBD

Presenters

- Edward Myers, Kittelson & Associates, Inc.
- Ken Sides, City of Clearwater, Florida
- Howard McCulloch, NE Roundabouts
- Jeff Shaw, FHWA

9C) Design Concepts: Sidepaths, Adding More Legs to Roundabout, Flared Entries, and Pedestrian Design Checks

Moderator: TBD

Presenters

- Patrick Fleming, Wisconsin DOT, *Shared Use Paths & Roundabout Sidepaths*
- Mark T. Johnson, MTJ Engineering, LLC, *Effective Lane Utilization with Flared Entry Design*
- Troy Pankratz, GHD Inc., *Design Considerations for 5 and 6 Leg Roundabouts*
- Yashi Tandon, National Capital Region Planning Board, India, *Designing Pedestrian Friendly Roundabouts in Rapidly Growing Cities of India*

9:30 AM – 9:45 AM

Break

9:45 AM – 11:00 AM

Breakout Sessions

10A) Complexities of Multi-Lane Roundabouts and Safety

Moderator: TBD

Presenters

- Andrew Plowman, WSB & Associates, Inc., *Safety Performances of Multi-Lane Roundabouts*
- Hillary Isebrands, FHWA, *The Multi-lane Roundabout PDO Dilemma*
- Mark T. Johnson, MTJ Engineering, LLC, *Optimizing Roundabout Safety and Operations*
- Sam Bobko, Hatch Mott MacDonald, *The Roundabout Was Supposed to Reduce Crashes. What Happened?*

10B) Unique Roundabout Applications – Case Studies PART 3

Moderator: TBD

Presenters

- Phil Weber, GHD Inc., *Freeway Termination Roundabouts*
- Pete Jenior, Kittelson & Associates, Inc., *Walnut Lane Traffic Circle Retrofit*
- Anne Sherwood, Halifax Regional Municipality, Canada, *North Park Street Roundabouts: A Halifax Urban Challenge*

10C) Speed Management for Roundabouts

Moderator: TBD

Presenters

- John Denholm III, Lee Engineering, LLC, *A Review of Speeds at Roundabouts in North Texas*
- Victor L. Salemann, Transportation Solutions Inc., *Case Study of a Rural Roundabout*
- Éric Dessureault, WSP Canada Inc., *High-Speed Roundabouts: Case Studies in Quebec*

11:00 AM – 12:15 PM

Closing Plenary Session

11) Town Hall Roundabout Forum

Sheraton Seattle Map