

A New Tool in Your Toolbox

Registration Form

Regardless of your current knowledge, you will gain a better understanding of the complexities of roundabouts as well as specific design principles and safety issues.

This workshop is intended to have full participation of attendees including open discussions and "hands-on" design training with classroom examples. Workshop topics include the details of modern roundabout design principles with a focus on multi-lane roundabout operations and issues. During the course, specific details in roundabout design will be presented using geometric design principles with respect to both capacity and safety.

Although roundabouts have proven safety and operational benefits, proper planning and engineering design is essential for roundabouts to function correctly. This practical course is your opportunity to understand modern roundabout operations, specific design issues, and key review concepts to apply to projects in your area.

Course Objectives:

- 1 Understand design principles in creating safe and efficient roundabouts
- 2 Recognize appropriate and inappropriate design details for both single lane and multi-lane roundabouts
- 3 Identify an appropriate location and placement of a roundabout
- 4 Know how to adequately discuss the operations, design details, and benefits of roundabouts
- 5 Understand basic and advanced features of the operation, design, and safety elements of roundabouts
- 6 Learn some of the risks and consequences of poor roundabouts as well as remedies to resolve deficiencies
- 7 Identify additional resource information

Registration Fee: \$375

Registration Information

(Please submit one form for each attendee)

Name

Organization or Company

Current Title or Position

Address

City

State

Zip

Phone

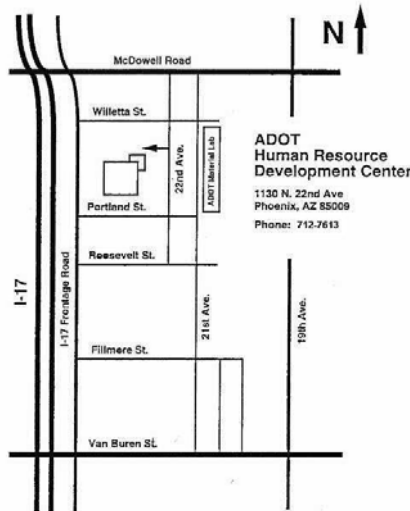
E-Mail

SEND REGISTRATION FORM AND PAYMENT TO:

Roundabouts & Traffic Engineering
20 Crimson Vista Lane
Sedona, AZ 86351
(928) 284-0366

A limited number of seats will be available to public jurisdictions at no charge. Please call RTE for details and availability.

Note: Full payment must be received prior to workshop. Cancellations within 14 days prior to the seminar are subject to a \$200 cancellation fee. Substitutions are welcomed at any time.



Presented by:
RTE
Roundabouts & Traffic Engineering

www.roundabouts.us

Designing & Implementing Roundabouts

Sponsored by:
ADOT

1 1/2 Day Workshop on Roundabouts & Design

March 26 – 27, 2009
Phoenix, Arizona

ADOT Human Resource Development Center
1130 N. 22nd Ave.
Phoenix, AZ 85009

Focus on Roundabout Planning, Design & Implementation

Roundabouts have their own unique set of characteristics and implementation impacts. Proper evaluation and comparison as well as public involvement and communication of the roundabout option require a detailed understanding of their planning, design, and implementation. The transportation design references commonly used in the United States address roundabouts in a limited manner. This roundabout training seminar and workshop provides:

- » A deeper understanding of the theory of roundabout operational design and safety
- » Teaching on key design topics including geometric and non-geometric issues
- » Common sense practice based on empirical theory
- » A summary of key information and specific issues in current roundabout guides
- » Correct design methods and the results of improperly designed roundabouts
- » Extensive roundabout photographs, videos, and designs from the instructor's research and travels throughout the world
- » Opportunities for extensive discussion about roundabout considerations with an experienced roundabout design specialist

"Your (Scott Ritchie's) roundabout project design history involving complex designs from around the United States and specifically your involvement with WisDOT roundabout design, training and insight has demonstrated your ability to understand and design complex multi-lane roundabouts from a holistic approach."

**Wisconsin Department
of Transportation**

Workshop Topics

March 26, 8 a.m. to 4:30 p.m.
March 27, 8 a.m. to Noon

Safety

- » Principles of Safety Explicit in Design
- » Site Selection & Roundabout Sizes
- » Design Safety Checks
- » Controlling Speeds
- » Multi-lane Lane Configurations
- » Multi-lane Path Overlap
- » Designing for Trucks at Multi-laners
- » Case Studies & Examples
- » Pedestrians & Bicycles
- » High Speed Approaches
- » Hands-on Multi-lane Design Example

Capacity

- » Relating Geometry to Capacity
- » Determining Lane Configuration
- » Traffic Volume Diagrams
- » Multi-Lane Capacity with Trucks
- » Software vs. Design Values
- » Using RODEL
- » Roundabout Corridors

Roundabout Guides

- » Using FHWA Guide
- » Using State Guides
- » Rbt Guides in Practice
- » Guides vs. Design
- » Guides vs. Software
- » Modeling Policies & Standards
- » Expanding Guide Capabilities
- » Guide Pitfalls / Errors
- » Useful Guide Resources
- » Updates to Guides
- » 2010 MUTCD Signing & Striping

Expert Knowledge

- » Multi-lane Design Techniques
- » Multi-lane Fatal Flaw Analyses
- » Closely Spaced Intersections
- » Design vs. Field Operations
- » Roundabout Plan Sets
- » Using RODEL
- » Using AutoTurn for Trucks
- » Skewed Intersections with Rbts
- » Unique Lane Configurations
- » Vertical Design
- » ADOT Guest Speakers

About the Instructor:

Scott Ritchie, P.E., Roundabout Specialist

Scott Ritchie has been involved with the design, review, modification, evaluation, redesign, and presentation of hundreds of roundabouts throughout North America. Most of these projects include working for the federal government, state departments, and county and city jurisdictions throughout the United States.

As a roundabout design specialist with roughly **300 modern roundabout designs** in the United States, Mr. Ritchie has been formally recognized as a roundabout design expert and qualified training instructor of modern roundabouts throughout the United States. He specializes in designing complex multi-lane roundabouts from a holistic approach. Scott currently provides continuous working relations for many state and local jurisdictions.

Mr. Ritchie is also deeply involved with the public education of the modern roundabout with many roundabout publications, roundabout design guides, and roundabout training seminars and workshops. Scott has taught numerous roundabout educational design courses and has been involved with several roundabout design guides and committees, and written several roundabout publications for entities such as the Transportation Research Board (TRB), the Institute of Transportation Engineers (ITE), Manual of Uniform Traffic Control Devices (MUTCD), the Federal Highway Administration (FHWA), and various jurisdictions throughout the U.S.

**For more information about
RTE and Scott Ritchie
please visit our Web site at
www.roundabouts.us or call us at
(928) 284-0366.**