

## Roundabout Design: Best Practices, Challenges, and Innovations

Roundabouts have been gaining popularity in North America as a viable alternative to traditional intersections. As a means of traffic control and flow, roundabouts are known for reducing crash severity by enhancing road safety and efficiency.

Unfortunately, a poorly designed roundabout can cause problems with public perception. The public typically cannot discern a good and integral design from one that is inadequately designed. Once they have

a poor opinion of one, it can drastically affect their perception of all other roundabouts, no matter how well laid out they are.

This course, led by **Rachel Price, P.E.** and **Michelle Mach, P.E.** from ROUNDABOTIX, two nationally recognized roundabout experts with decades of combined experience, equips engineers with the fundamentals and practical knowhow to design roundabouts that truly serve their communities.

### WHO SHOULD ATTEND?

Transportation engineers, designers, consultants, and roadway planners involved in intersection design projects.

### DURATION

4 hours total

### PREREQUISITES

- Basic understanding of Autodesk® AutoCAD® or Bentley® MicroStation®
- General understanding of intersection design concepts

### COURSE OBJECTIVES

- Understand why a roundabout should be considered and where it is appropriate
- Identify the key elements that contribute to roundabout design
- Apply the design elements holistically to produce a safe and efficient intersection
- Determine whether a roundabout meets acceptable design standards
- Recognize the inherent benefits roundabouts offer non-motorized users and optimize them through good design decisions
- Define the components of accessible roundabout design
- Apply appropriate traffic control devices for roundabout contexts
- Identify different approaches to accommodate bicycle traffic
- Reduce collisions and increase efficiency in multi-lane roundabouts



## COURSE CONTENT

- **Benefits of Roundabouts**  
Solving intersection challenges with circular designs
- **Roundabout Geometrics**  
Combine individual design elements for a successful roundabout project
- **Evaluate Roundabout using Performance Measures**  
Determine insufficiencies in design before a roundabout is constructed
- **Roundabouts for Non-Motorized Users**  
Creating intersections that encourage active transportation
- **Beyond the Roundabout Geometrics**  
Supplemental elements such as signing, striping, and landscaping to enhance roundabout performance
- **Challenge accepted: Multilane Designs**  
Common collisions in multilane designs and how to avoid constructing a problem intersection
- **Use of Technology /Tools Geometric Design**  
Analysis: Design Vehicle, Speed, Path Overlap, Ground Clearances



## Contact Us

To register or request additional information, please contact your Account Manager or email [salesNA@transoftsolutions.com](mailto:salesNA@transoftsolutions.com)