

the instructor

Leif Ourston

Leif Ourston is the president of Ourston Roundabout Engineering, Inc., a corporation in Santa Barbara, California that specializes in the design of modern roundabouts. Mr. Ourston received his Bachelor of Science degree in engineering from California State University at Northridge. He is a registered civil engineer in California and a member of the Institute of Transportation Engineers. Mr. Ourston has authored several papers on modern roundabouts.

Mr. Ourston's firm designed the first three modern roundabout interchanges in the United States. It led the Roundabout Revolution in America with several design accomplishments:

- America's first two modern roundabouts, in Las Vegas, NV in 1990.
- America's highest volume modern roundabout, in Long Beach, CA in 1993.
- Maryland's first modern roundabouts, in Lisbon and Gaithersburg in 1993.
- The first three modern roundabout interchanges in North America, in Vail and Avon, CO 1995-97.
- America's first three modern roundabouts to replace traffic signals, in Avon, CO in 1997.
- America's first string of modern roundabouts to eliminate congestion in Avon, CO in 1997.

Mr. Ourston helped the states of California, Florida, Kansas, Maryland, Michigan, and Wisconsin begin their modern roundabout programs. He authored the most widely used roundabout design manual in the United States, *Roundabout Design Guidelines*. For more information, see www.ourston.com.

Mr. James Ito, P.E.
Active Traffic Alternatives LLC
1570 North Prospect Avenue, #708
Milwaukee, WI 53202
Telephone: 414 765-9705
Email: jitoata@aol.com

ourston roundabout design workshop



Photo Ed Waddell

www.ourston.com

July 1st to 3rd, 2004
Avon, Colorado

Instructor: Leif Ourston, P.E.
Ourston Roundabout Engineering
Santa Barbara, California

COURSE*Description*

The three-day workshop will be offered in Avon, Colorado, from July 1 to 3. Through hands-on exercises we apply the basic principles of all aspects of roundabout design: horizontal design, vertical design, signing and striping, lighting, cyclist and pedestrian facilities, landscaping, and drainage.

We work together as a team, moving from step to step in the design of a single roundabout of moderate difficulty. We dimension the roundabout for adequate capacity by use of RODEL. We optimize the design for safety by use of RD2. We design for optimal lane use on roundabout approaches by use of lane-assignment arrows and within the circulatory roadway by use of spiral striping.

For guidance we draw from useful parts of the available literature, including: *Roundabouts: An Informational Guide*, by Bruce W. Robinson, Joe Bared, and others; *The Design of Roundabouts*, by Mike Brown; *NCHRP Synthesis 264, Modern Roundabout Practice in the United States*, by Georges Jacquesmart; and *Roundabout Design Guidelines*, translated to American English from British guidelines by Leif Ourston. Participants receive a copy of *Roundabout Design Guidelines*.

In a road planning exercise, we determine which intersections should be roundabouts and which should be other types of intersections. We apply the British practice of planning less expensive intersections where possible, usually T-intersections or offset intersections, often regulated by side-street yield signs.

We study the key one or two creative techniques that unlock difficult design challenges at each site, and we quickly apply these techniques with pencil sketches in design exercises. In this way we expand our ability to deal with the design of roundabouts at difficult sites, including sites having high-speed approaches, high traffic demands, multiple spoke roads, and difficult site constraints.

We work in groups of two or three, and only one member of each group needs to have RODEL and AutoCAD up and running. A time-limited demo version of RODEL is e-mailed to you prior to the workshop. You may order a permanent version of RODEL from Barry Crown. Contact him at RSLCrown@aol.com. (On some laptops RODEL does not run with Windows XP. If you find prior to the workshop that your laptop does not run RODEL with Windows XP, you may wish to install an earlier version of Windows on a partitioned disk for this workshop, or borrow another laptop, or look on with your teammate.)

With the help of two guest speakers, Scott Ritchie of LSC Transportation Consultants, Inc. and Mark Lenters of SRM Associates, we will learn how to sign, stripe, and light roundabouts. We will learn how to prepare economic studies which compare the traffic and safety performance of roundabouts and of signalized intersections. We will learn a system of roundabout signing adapted for North America from the color-coded and illuminated roundabout signs used in the United Kingdom.

Mr. Ritchie will present the history of roundabouts in the United States and Europe. Mr. Lenters will conduct a tour of local roundabouts and give interpretative commentary.

COURSE*Location & Accommodations*

A block of rooms has been set aside at the Comfort Inn at the rate of \$79 per night for June 30 and July 1, and \$129 per night for July 2–4. This is for single or double occupancy. Children under 12 stay free with a paying guest. Maximum occupancy is four persons. You are responsible for your own room reservations. Please call the Inn at 1-800-423-4374 no later than May 30, 2004, and mention “Ourston Roundabout Design Workshop” to get this block rate.

The Comfort Inn is extending a special rate of \$129 per night for July 2–4 to allow you to videotape and observe high-flow roundabouts. Some roundabout entries operate at capacity after the Fourth of July parade in Vail and after the fireworks in Avon. The additional time will allow you and your family to enjoy this great recreation area and to observe the congestion-free operation of modern roundabouts.

Please note that class begins at 8:00 a.m. on July 1, 2004.

The workshop will be held at the *Comfort Inn, Vail/Beaver Creek 0161 W. Beaver Creek Boulevard P.O. Box 5510 Avon, CO 81620*

**registration***Form*

Ourston Roundabout Design Workshop

July 1st to 3rd, 2004

Avon, Colorado

Fee: \$995 (\$1095 after

May 31, 2004)

(Please type or clearly print the required information)

Name _____

Title _____

Company _____

Address _____

City _____

State _____ Zip _____

Phone (____) _____

Fax (____) _____

Email _____

Total dollar amount enclosed \$ _____

Make checks payable to:
“Ourston Roundabout Engineering, Inc.”
Credit cards and purchase orders not accepted.

Mail completed registration form along with payment by May 31, 2004 to:

Mr. James Ito, P.E.
Active Traffic Alternatives LLC
1570 North Prospect Avenue, #708
Milwaukee, WI 53202
Telephone: 414-765-9705
Email: jitoata@aol.com

Mr. Ito is president of Active Traffic Alternatives LLC, specializing in traffic calming and modern roundabouts consulting. He recently retired from the position of Traffic and Lighting Design Engineer for the City of Milwaukee. Messrs. Ourston and Ito have partnered in producing this workshop to increase the appreciation and knowledge of high-capacity modern roundabouts.

Please pass this flyer on to another person. This flyer is also available at <http://www.ourston.com>

You can arrange to have a roundabout design workshop presented to your staff. Please contact Mr. Ito for details.