NCHRP 3-65: Applying Roundabouts in the United States

Preliminary Findings

TRB Roundabout Conference, Vail, CO
May 23, 2005
Topics of Discussion

- Project panel and team
- Project need and objective
- Preliminary findings
  - Data collection
  - Safety
  - Operations
  - Design
- Continuing and upcoming activities
Project panel

- Beatriz Caicedo-Maddison, Florida DOT (chair)
- Maria Burke, Texas DOT
- Jerry Champa, California DOT
- Leonard Evans, Science Serving Society
- Steve King, Kansas DOT
- Robert Limoges, New York State DOT
- Richard Long, Western Michigan University
- Ron Pfefer, HSM liaison
- Brian Walsh, Washington State DOT
- Mohsin Zaidi, City of Kansas City, MO
- Joe Bared, FHWA
- Hari Kalla, FHWA
- Rich Cunard, TRB
- Ray Derr, NCHRP
Project team

- P.I.: Lee Rodegerdts (KAI)
  - (Bruce Robinson, Co-P.I. Emeritus)

- USA
  - Kittelson & Associates, Inc.
  - University of Idaho
  - Rensselaer Polytechnic Institute
  - George Mason University
  - David Harkey
  - John Mason

- Australia
  - Rod Troutbeck

- Canada
  - Bhagwant Persaud

- Germany
  - Werner Brilon

- United Kingdom
  - Richard Hall
U.S. practice relies heavily on the experience from other countries.

- Current U.S. procedures depend on international methods without having U.S. data for calibration
- Use of roundabouts in the U.S. may differ from that experienced in other countries
The NCHRP 3-65 project objective is broad.

- Produce a set of operational, safety, and design tools, calibrated to U.S. roundabout field data.
Overview of research tasks

1. Summarize Existing Relationships
2. Model Formulation
3. Data Collection Plan
4. Interim Report
5. Execute the approved data-collection plan
6. Inventory U.S. Roundabout Sites
7. Operational Performance Methods
8. Safety Performance Methods
9. Design Criteria
10. Final Report
11. Prepare marketing materials
Anticipated products

- Final report
- Draft Highway Capacity Manual procedure
- Components compatible with a possible Highway Safety Manual procedure
- Updated design research
- Data that is accessible for future research
- Problem statement(s) for continued research
- Anticipated completion: December 2005
Session overview

- Data collection and extraction
- Preliminary safety findings
- Preliminary operations findings
- Preliminary design findings