NCHRP 3-65: Applying Roundabouts in the United States

Preliminary Findings

TRB Roundabout Conference, Vail, CO

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KITTELSON & ASSOCIATES, INC.
TRANSPORTATION PLANNING/TRAFFIC ENGINEERING

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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**