

NCITE Geometric Design Committee

Meeting Minutes

August 16, 2006

Attendees

Nick Costello Washington County
Gerry Raymaker TKDA
Suzanne Danen Dakota County
David Kuebler City of St. Paul
Jim Rosenow MNDOT
Chris Chromy Bolton & Menk
Bill Klingbeil HR Green

I. Round Robin

- A. Discussion of possible future topics
 - 1. Double right turn lanes – where they are the right solution.
 - 2. How to increase sight distance at opposing double left turn lanes.

II. Main Topic: Channelized and Free Right Turn Design

- A. Jim Rosenow discussed the history of MN/DOT channelized and free right turn design over the past 30 years. He also distributed excerpts from MNDOT Road Design Manuals from the '70's, '80's, and today for review and discussion by the committee.
- B. Committee members shared several examples of previous projects with channelized right turns. Examples were both standard and non-standard designs. The non-standard designs improved the entry angle of right-turning vehicles.
- C. The committee then discussed current practices
 - 1. Free right turns
 - i. Used mostly in rural areas since there are fewer access issues than in urban areas.
 - ii. There is often insufficient length to construct a free right turn before reaching the next access point.
 - 2. Channelized right turns
 - i. Existing intersections with channelized right turns that had high crash rates were found to have non-standard designs. Why aren't current standards being used?

- ii. Entry angle of the turning vehicles and pedestrian crossing locations should be taken into account when designing channelized right turns.
 - iii. Committee members acknowledged there are often trade-offs when designing channelized right turns that may require deviation from the standard design.
- D. The purpose of studying this topic is to review the current standards and practice and possibly make recommendations in the form of a position paper. In order to effectively do that, we need to ask the right questions.
 - 1. What are we trying to accomplish?
 - 2. Do we keep the current criteria and improve upon it?
 - 3. Do we need additional tools for proper design?
 - 4. If we recommend multiple design options, what is each option trying to accomplish?
- E. Homework for next meeting.
 - 1. Answer the 4 questions under section D.
- F. Next meeting September 20th, 2006 at HR Green from 8 AM to 10 AM.