

NCITE Geometric Design Committee

02/08/2018 Meeting Minutes

8:30 AM – 10:30 AM

Location: HR Green, Inc.
2550 University Avenue W., Suite 400N
St. Paul, MN 55114

Committee Chair:
Tom Jantscher, HR Green, Inc.
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Committee Co-Chair:
(vacant)

Meeting Minutes:

- I. Viewed presentation titled "RCUTs (Restricted Crossing U-Turn intersections" by Doug Carter, MnDOT State Geometrics Engineer. See meeting notes on next page.**
- II. Follow-up discussion (~20 minutes)**
- III. Announcement regarding Co-Chair opportunity and need for upcoming meeting topics**
- IV. Next Meeting: Time, location, and topic TBD.**

Meeting notes:

- These used to be called RCI's or Reduced Conflict Intersections, however the term could apply to many other applications, so they are now referred to as RCUTs or Restricted Crossing U-Turn intersections
- The main concern these address are that people are not good at judging far side gaps from side roads across high-speed divided roadways
- The design is still new but has evolved over the past few years where now the middle piece is designed more effectively for ease of maintenance and quicker construction
- Crash data show very reduced severe and fatal crashes, plus a reduction in overall crash numbers (unlike roundabouts)
- RCUT designs are very site-specific but can be adaptable to a wide range of situations
- A 2016 MnDOT study concluded that RCUTs result in a 77% reduction in right-angle crashes, a 40% reduction in left-turn crashes, and a 31% reduction in multivehicle crashes
- More recent concerns involve finding ways to reduce construction cost, especially by not applying all the "bells and whistles" such as offset turn lanes
- MnDOT has reviewed concerns with heavy & commercial vehicle and agricultural equipment, with positive results
- RCUTs are part of the "superstreet" concept, which is a corridor of signalized RCUT intersections. This concept is being applied along TH 65 in Ham Lake, MN.
- Important to note that RCUTs are safety improvements and not capacity improvements, and many are implemented with HSIP funds
- Also important that MN design of RCUTs is very specific to MN and different than elsewhere
- Considerations that go into design of RCUTs include: demand balance, spacing from intersection to the median U-turn, maintenance, signage, median width, design vehicle, pedestrian accommodations, and others
- It is unrealistic to expect full compliance from a signing standpoint for RCUTs
- Link to MnDOT RCUT Tech Memo that Doug handed out:
<http://dotapp7.dot.state.mn.us/edms/download?docId=1783214>