A Safety Evaluation of Intersection Conflict Warning System (ICWS)

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ABSTRACT
Rural intersections account for 30% of crashes and 6% of all fatal crashes. A promising solution has been to use Intersection Conflict Warning System’s (ICWS) at rural two-way stop-controlled intersections. Early studies indicate lower intersection approach speeds, reduced conflicts, improved compliance with traffic control, and improved gap selection.

RESEARCH QUESTION/HYPOTHESIS
Effect of increasing awareness of crossing vehicles at major and minor highways using an Intersection Conflict Warning System (ICWS) on crash outcomes.

RESULTS & GRAPHICS/CHARTS
The results of this research are expected to be submitted for final approval and publication in late 2016.

- Actual ICWS (signals viewable from both major and minor highway approaches)
- Flashers activated when vehicles are present on intersecting highway
- ICWS approach setup sketch
- Detection Zones used to activate ICWS on both approaches simultaneously
- One of six intersections in Minnesota with four cameras
- Two cameras with whole intersection view
- Two cameras parallel to minor highway stop bar view

DISCUSSION
The results of this research are expected to be submitted for final approval and publication in late 2016. This is a 3-year research project; sufficient time must pass to adequately address the long-term effects of ICWS implementation. The long-term results will be drafted into a recommendation proposal to the MnDOT.

REFERENCES

ACKNOWLEDGEMENT
I would like to thank Dr. Shauna Hallmark for allowing me to participate in her research at her lab at Iowa State University. I would also like to thank Bo Wang and Raju Thapa for allowing me to research along side of them, and for their mentorship and patience in teaching me to reduce video data. Finally, I would like to thank Adah Leshem, Stacy Renfro, Diana Loutsch and NSF for funding the RET program.

The material presented here is based upon work supported by the National Science Foundation under Award No. EEC-0813570 and EEC-1406296. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Science Foundation.