

Identifying Issues Related to Deploying Automatic Enforcement in Minnesota

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(summarizing work from 2013 – 2018)

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Driven to DiscoverSM

ASE and Speeding

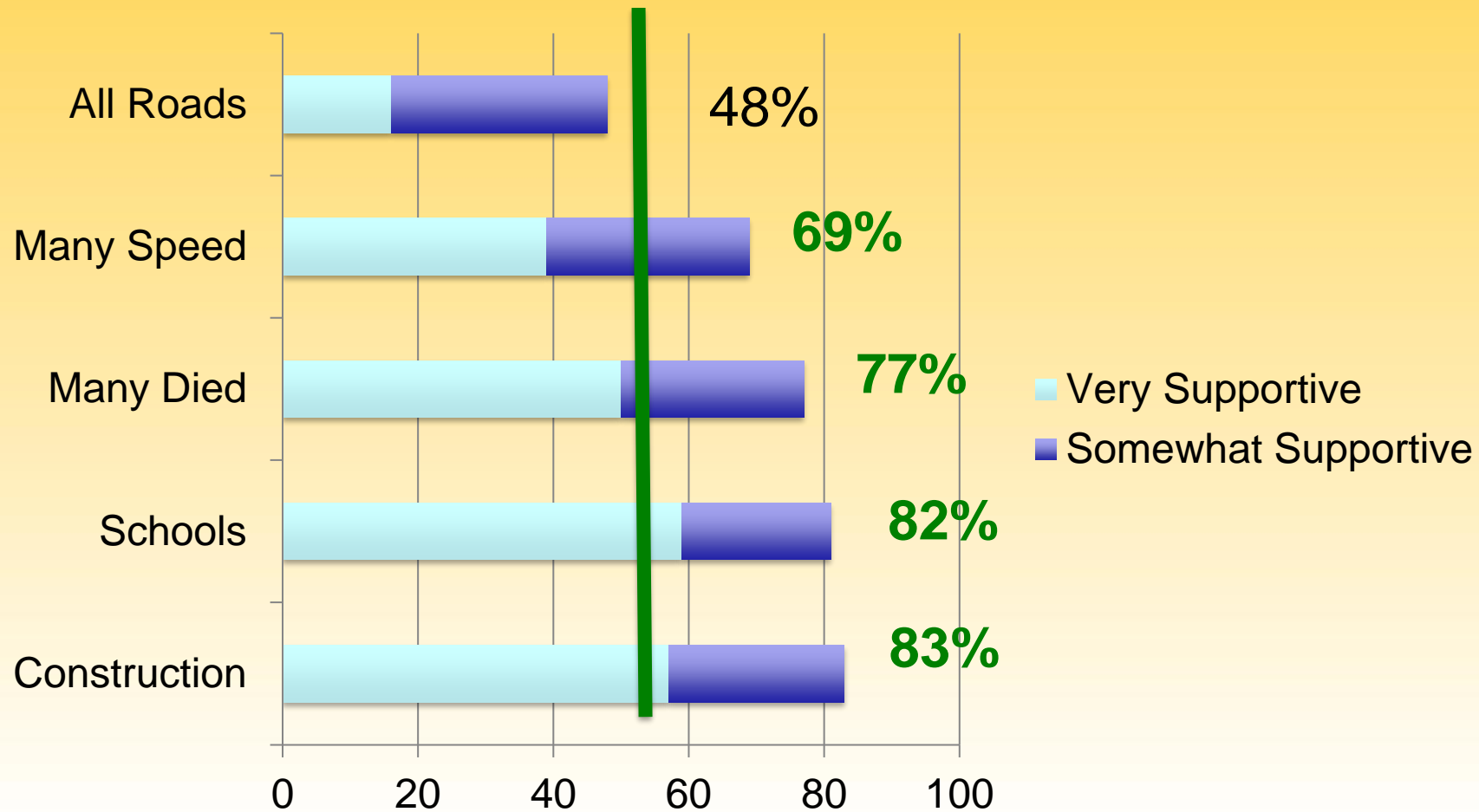
- Deterrence depends upon certainty and severity of enforcement
- Speeding contributes to the frequency and severity of crashes
 - Speed leading factor in fatal crashes in 2014
 - 8360 include speed as a factor
 - 5492 alcohol, drugs or other medication
 - 3000 distracted driving
 - Speed implicated in roughly one-third of roadway fatalities in 2015
- Adding Automated Speed Enforcement could lead to
 - 20% reduction in crashes (NHCRP)
 - 10 to 20% reduction in fatalities (Knapp and Utecht 2010)

ASE and Speeding

Cochrane Review (2010): review of 35 international studies of ASE concluded:

- ASE is effective at reducing speeds and traffic injuries/deaths
- Most countries saw a 10% to 35% reduction in the proportion of speeding vehicles in the vicinity of ASE sites
- All crash types decreased 8% to 49%
- Crashes involving fatalities or serious injuries decreased 11% to 44%

Support For ASE Use In Select Locations



References

Douma, F., Munnich, L., & Garry, T. (2014). *Options for Automated Speed Enforcement Pilot Projects in Minnesota Work and School Zones*. (Report No. CTS 14-06). Retrieved from <http://www.cts.umn.edu/Publications/ResearchReports/reportdetail.html?id=2360>.

Douma, F., Munnich, L., Loveland, J., & Garry, T. (2012). *Identifying Issues Related to Deployment of Automated Speed Enforcement*. (Report no. CTS 12-23). University of Minnesota Center for Transportation Studies Retrieved from <http://www.cts.umn.edu/Publications/ResearchReports/reportdetail.html?id=2158>.

Knapp, K., Young, K., & Utecht, B. (2009). *Feasibility of a Quantitative Rural Safety Policy Improvement Index (RSPII): Phase I*. (Report no. CTS 09-14). Retrieved from <http://www.cts.umn.edu/Publications/ResearchReports/reportdetail.html?id=1766>

Munnich, L., & Loveland, J. (2011). Do Americans oppose controversial evidence-based road safety policies? *Transportation Research Record: Journal of the Transportation Research Board*(2213), 9-12. doi:<http://dx.doi.org/10.3141/2213-02>

Nicholson-Crotty, S. and Ritchey, M. Deterrence Theory and the Implementation of Speed Limits in the American States. *The Policy Studies Journal*, Vol. 39, No. 2, 2011, p. 332-341.

Wilson C., Willis C., Hendrikz J.K., Le Brocq R., and Bellamy N. Speed cameras for the prevention of road traffic injuries and deaths. *Cochrane Database of Systematic Reviews* 2010, Issue 10. Art. No.: CD004607. DOI: 10.1002/14651858.CD004607.pub3.