



Research In Progress

The Effect of Sight Distance Training on Motorcycle Skills

Project Manager: Jenny Percer, (Email: Jennifer.percer@dot.gov, Phone: 202-366-9785)

While motorcyclist fatalities continue to increase, the cause is unclear. Motorcycle safety advocates often argue that motorcycle training is the best countermeasure to reduce motorcycle crashes. However, the limited research on the effectiveness of training suggests that the benefits of training last approximately 6 months.

Team Oregon, who conducts motorcycle training, proposes that overriding sight distance (when total stopping distance exceeds sight distance) is a possible cause of riders running off the road. In addition, overriding sight distance makes it difficult to detect and respond to road hazards with enough time to avoid collisions. Team Oregon and Dynamic Research collected preliminary data on experienced motorcycle riders using an eye tracker. After collecting baseline data, riders received feedback on visual search strategies to increase their sight distance and were re-tested with the eye tracker. There were marked improvements in visual lead and accuracy after receiving feedback.

NHTSA is conducting a study using eye tracker technology to assess differences in line-of-sight among motorcycle riders. This is a longitudinal study where participants will be tested at 6 month intervals over a year (baseline, 6 months, 12 months). The objectives of this study are to 1) determine whether providing line-of-sight distance training increases riders' line-of-sight, 2) compare trained-novice riders, untrained-novice riders, and experienced riders on line-of-sight on a closed circuit course and an open circuit course and, 3) compare the interaction of performance on courses (open and closed) and line-of-sight among trained-novice riders, untrained-novice riders, and experienced riders over time.

Start Date:	August 6, 2008
End Date:	August 23, 2010
Contractor:	Westat, 1650 Research Boulevard, Rockville, MD 20850
Contract Number:	DTNH22-05-D-01002
Total Contract Cost:	\$349,754

Date Last Updated: March 10, 2009