

Allocation of driver's attention given increasingly autonomous vehicle systems

Dr. Linda Boyle

Chair & Professor

Industrial & Systems Engineering

University of Washington

Abstract: As technology becomes more able to assist travelers in driving tasks, the human operator may become less attentive to their environment. Safe transport requires an understanding of the road user, their intended trip purpose and their perceptions of safety. In today's driving environment, the human driver needs to continually switch between driving and non-driving activities. The changes in drivers' allocation of attention occurs over time and depends greatly on the context, and type of secondary tasks that the human is engaged in at the moment. Parsing out this attention has implications for the future design of cars.

Bio: Linda Ng Boyle is Professor and Chair of the Industrial & Systems Engineering Department at the University of Washington, Seattle. She has a joint appointment in Civil & Environmental Engineering. She has degrees from the University of Buffalo (BS) and University of Washington (MS, PhD). She is an organizer for the International Symposium on Human Factors in Driving Assessment and co-author of the textbook, "Designing for People: An Introduction to Human Factors Engineering".