

Maria Galbraith

Department: Engineering Management and Systems Engineering
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Research Advisor: Dr. Casey Canfield
Advisor Department: Engineering Management and Systems Engineering
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Behavioral Science Can Increase Zipper Merge Usage

Research demonstrates that zipper merges (or late merges), under heavy traffic conditions, are safer and faster than a traditional early merge. In implementation, zipper merges can be less efficient due to a lack of compliance on the part of drivers, often more accustomed to early merging. Behavioral science has been applied to a many transportation-related challenges, such as increasing seat belt usage and decreasing drinking and driving but has not yet been applied to the zipper merge. We have identified six relevant behavioral science strategies including (1) social norms, (2) appeals to reason, (3) emotional appeals, (4) humor, (5) memory activators, and (6) information versus instructions. We coded the presence of these strategies in existing communications from U.S. state Departments of Transportation. We report our findings for road signs and web-based public communications. Although there were trends across each category, there was high variation between states. This review suggests that there is a need to further investigate the potential of more behaviorally informed communications to increase compliance for zipper merges.

Maria Galbraith is a senior studying Engineering Management with an emphasis in Management of Technology. She is an active member of the Rolla Catholic Newman Center, as well as working on this research project with Dr. Canfield since June. When not working or studying, Maria enjoys exploring the beautiful Rolla outdoors, singing or listening to music, acting with the local Fine Linen Theatre, and making and drinking coffee. After college, she plans to move to Kansas City and find a job she loves.