ASSESSMENT OF DRIVER ROUTE DECISION-MAKING DURING A RANGE OF INCIDENT-INDUCED TRAFFIC FLOW DISRUPTIONS

Drivers typically plan and carry out travel to most effectively utilize their time. A key component of travel planning is to select routes, times, and modes that minimize both travel duration and delay. However, such plans are based on prior experience under routine travel conditions. When infrequent, yet inevitable, incidents occur that cause congestion and delay, many drivers make decisions to increase the efficiency of their trip.

Although one of the most common driver strategies is to divert travel to alternative routes, relatively little is known about the motivation of this decision-making nor the characteristics that most acutely effect driver choice. The goal of this research is to address the need for a better understanding of route-diversion behavior by assessing driver decision-making under a range of incident, traffic, and guidance conditions. The result of this research is expected to advance both research and practice.