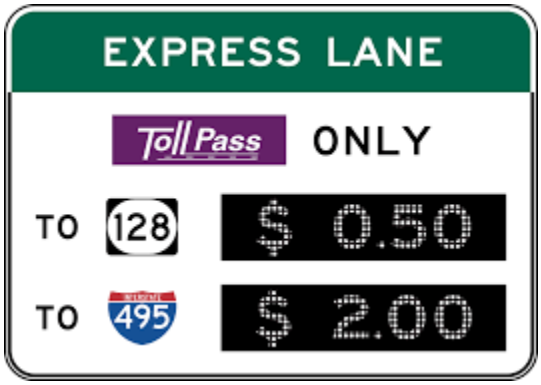
Research Fact Sheet

Research project: **Evaluating Equity Issues for Managed Lanes: Methods for Analysis and Empirical Results**

What's the issue?

Managed lanes, which charge a toll, can help alleviate congestion without having to build extensive new infrastructure. But in the past, assessing the impact on drivers' incomes ignored the so-called Income Effect – the fact that a change in driving cost is not the same for all individuals but depends on their income level. The two measures most commonly used to evaluate such projects, Log-sum and Rule of a Half, assumed the absence of the Income Effect. This project proposed a methodology that accounts for the Income Effect to provide a more accurate evaluation of the impacts of managed lanes.



What did the research discover?

This project, which gathered 766 responses from drivers who travel during the weekday rush hours on the Maryland side of the Capital Beltway, provides empirical evidence that the Income Effect exists in real data relative to travel behavior on managed lanes. The effect of earnings is not constant and highly influences drivers' behavior. As this study illustrates, Log-sum and Rule of a Half are inaccurate measures when formulating toll policy. This study offers an improved methodology for determining the benefits of managed lanes, which is particularly timely given current proposals to add such lanes to the Capital Beltway.

How can I implement this?

The methodology developed in this research provides a tool to more accurately evaluate the impact of proposed policies on drivers of all income levels.

Learn more:

Details about this research project, Evaluating Equity Issues for Managed Lanes: Methods for Analysis and Empirical Results, and a link to the full report can be found at https://www.morgan.edu/school_of_engineering/research_centers/urban_mobility_and_equity_center/research/completed_research/equity_issues_for_managed_lanes.html

The Urban Mobility & Equity Center is a federally funded research consortium led by Morgan State University and includes the University of Maryland and Virginia Tech. www.morgan.edu/umec