

Project Overview Report

1. UTC Identifying Number

DTRT13-G-UTC28

2. Center Identifying Number

CAIT-UTC-NC40

3. Project Title

The Impact of Tolls on Access and Travel Patterns of Different Socioeconomic Groups: A Study for the Greater New York Metropolitan Area

4. Principal Investigator & Contact Information

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5. Rutgers/CAIT Project Manager

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7. Project Description

This research will analyze data from the 2011 household travel survey for the Greater New York Metropolitan area, conducted by the New York Metropolitan Transportation Council (NYMTC) and the North Jersey Transportation Planning Authority (NJTPA), to examine the potential impacts of tolls on the travel patterns of people in general and workers in particular. The impacts will be assessed regarding the use of alternative routes, modes, and destinations. The survey data includes detailed trip patterns (by mode and travel time) for residents of two southern counties of Connecticut, New York City and its surrounding counties, and 14 counties of New Jersey. Street network GIS shape files, Census Transportation Planning Products (CTPP) data, and data from the American Community Survey (ACS) will be integrated with survey data for analysis. At an initial step, trips from the survey data that have toll facilities on the fastest route between the origins and destinations will be identified. By focusing on those trips, comparisons will be made between those who actually used toll facilities and those who used alternative routes and modes to examine if there are variations between the toll payers and others in terms of socioeconomic characteristics. In the subsequent part, employment centers within the region will be identified and the characteristics of the workers traveling to those centers by using toll facilities will be compared with the characteristics of travelers traveling to those centers by using alternative routes and modes. In the third part, this research will examine if travelers from low-income and minority households travel longer distances or spend more time traveling than other workers when toll facilities are present between their homes and proximate employment centers. The policy implications of the findings will be discussed in the context of the USDOT's strategic goals.

8. Implementation of Research Outcomes (or why not implemented)

This research will benefit (a) policy makers, (b) transportation agencies, (c) transportation professionals, and (d) transportation researchers. Policy makers will benefit from the discussions in the study

about the impacts of tolling on the general population and workers belonging to different socioeconomic classes. Policy makers in places where HOT lane projects are currently under review will benefit the most because of the high relevance of tolling in those places. Agencies that fund transportation projects will benefit from the study since they will learn how people use alternative routes and modes to avoid tolls. For example, transportation agencies often consider subsidizing people adversely affected by tolls through transit credit. This study will demonstrate whether the adversely affected people in reality use public transportation or use alternative highway routes. Transportation professionals and researchers will benefit from the study for its substance and methodology. The GIS and statistical analyses of the study will be beneficial because of their rigor and novelty.

9. Impacts/Benefits of Implementation (actual, not anticipated)

TBD

10. Dates and Budget

Start Date: 6/1/2016

End Date: 12/31/2016

UTC (CAIT) Dollars: \$ 29,589

Cost Sharing: \$ 0

Total Dollars: \$ 29,589

11. Keywords

Toll; Tolling; Equity; Congestion pricing; Environmental justice; HOT lane; Cordon Pricing

12. Web Links (Reports and Project Website)

<https://cait.rutgers.edu/cait/research/impact-tolls-access-and-travel-patterns-different-socioeconomic-groups-study-greater-0>