



PROJECT TITLE: ENERGY SAVINGS FROM TRANSIT PASSES: AN EVALUATION OF THE UNIVERSITY AT BUFFALO NFTA TRANSIT PASS PROGRAM FOR STUDENTS, FACULTY, AND STAFF

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INSTITUTION: UNIVERSITY AT BUFFALO/SUNY

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SPONSOR: UNIVERSITY TRANSPORTATION RESEARCH CENTER (UTRC)

Key Elements of Project

This research project explores sustainable transportation programming and policy on university campuses by evaluating a transit pass program in which select students, faculty, and staff at the University at Buffalo were issued pre-paid unlimited transit passes for Metro Rail, the light rail system operated by the Niagara Frontier Transportation Authority. The survey team analyzed existing data and produced new data (in-depth expert interviews and an Internet survey) to evaluate the program, including: (1) its effect on travel and automobile use and ownership; (2) changes in access and mobility for students, faculty, and staff; and (3) the costs and benefits of the program for individuals, for the University at Buffalo, and for the transit system. The research team engaged with the community by establishing a project advisory committee of local leaders (from municipal governments, New York State government, and non-governmental planning organizations).

Three graduate students in the School of Architecture and Planning at the University at Buffalo received financial support from this project. Students research assistants participated in all aspects of the research project, including the outreach activities mentioned above.

Research Products

Published technical report:

Hess, Daniel Baldwin, with Paul Ray and Nathan Attard. 2014. *Connections Beyond Campus: An Evaluation of the Niagara Frontier Transportation Authority – University at Buffalo Pilot Transit Pass Program*. Buffalo, New York: University at Buffalo Regional Institute. [funded by University Transportation Research Center – Region II].

In addition, two scholarly articles intended for publication in peer-reviewed scholarly journals, are in development.

Project Summary

The UB-NFTA Pilot Transit Pass Program concluded after 20 months at the end of the summer 2012 session. The program offered rail

passes to 1,072 students and 246 faculty and staff during the 2010-2011 academic year, and to 2,813 students and 310 faculty and staff during the 2011-2012 academic year. This report seeks to evaluate the effectiveness of the program in a number of focus areas, including the cost of the program to the parties involved, and also the benefits obtained both by the participating organizations and by individual transit pass users. This is accomplished through the use of both qualitative and quantitative analysis of the results of a university-wide survey conducted by the research team in April 2013.

The analysis of this project revealed many expected and unexpected results. Some users of the transit pass were new Metro Rail riders, and some previously paid their own fares. The UB-NFTA transit pass was under-priced, which benefited UB and led to lost revenue for the NFTA throughout the course of the program. The program allowed 72 survey respondents to cease owning a vehicle, and 179 respondents to delay owning a vehicle, effectively reducing the cost of a UB education by thousands of dollars a year for participants who could utilize Metro Rail to commute to campus in place of an automobile.

The UB-NFTA Pilot Transit Pass Program increased transportation choices and for the first time provided university community members a transportation subsidy which did not take the form of a parking space. The program had the potential to change modes of travel for students, faculty, and staff to the three UB campuses, and did for a short period of time, even if it was done unintentionally. Many survey respondents reported that widening their travel options, using public transit more, driving less, and reducing their carbon footprints were important personal benefits of the pilot transit pass program.

UB's pilot transit program provided many benefits to community members, from increased access to new destinations and housing, to reduced demand for parking. The design of a permanent UB-NFTA transit pass program, if an agreement is reached in the future, should help the NFTA mitigate lost revenue from pass holders, and should be understood as a means for UB to reduce future capital expenses and greenhouse gas emissions.