

ScholarWorks@UMass Amherst

MASTERS THESES 1911 - FEBRUARY 2014

Off-campus UMass Amherst users: To download campus access theses, please use the following link to [log into our proxy server](#) with your UMass Amherst user name and password.

Non-UMass Amherst users: Please talk to your librarian about requesting this thesis through interlibrary loan.

Theses that have an embargo placed on them will not be available to anyone until the embargo expires.

Title

[How Well do Neighborhood Characteristics Predict Transit Ridership in a College Town?](#)

Authors

Krystal M. Oldread, *University of Massachusetts Amherst* Follow

Document Type

Open Access

Degree Program

Regional Planning

Degree Type

Master of Regional Planning (M.R.P.)

Year Degree Awarded

2011

Month Degree Awarded

February

Keywords

Public transit, Ridership, College towns

Abstract

This study looks at the demographic, urban form and transit service characteristics that influence ridership in a college community. It acknowledges both the internal (those that a transit operator has control over) and external (variables that the transit operator cannot control) factors that influence ridership. A literature review shows that income, unemployment levels, densities, age, urban form, headway and coverage correlated to ridership.

The study area used is the Five-College community that is serviced by UMass Transit, the dominant operator in the area. To perform analysis census data is collated at the block and block group levels regarding income, unemployment, vehicle ownership, population, density, college age population and housing age. Additional data about urban form and transit service characteristics is obtained. Exploratory data for all variables support the literatures finding except unemployment and land use diversity.

Modeling is done in three stages using different scales of census data. A final model, combining scales is created. The highest indicators of ridership are found to be direction of travel, level of service, the percent of college age students and population density.

First Advisor

Mark Hamin

[Download](#)

DOWNLOADS

Since March 09, 2011

Included in

[Urban, Community and Regional Planning Commons](#)

Share

COinS