Chester Harvey
Advisors: Austin Troy (UVM), Morgan Grove (USDA Forest Service)
Abstract for Poster
February 21, 2013

Title: The relationship between multimodal transportation infrastructure and housing prices in Baltimore

Accessibility to transportation infrastructure is an important factor of property values. As cities develop increasingly multimodal transportation networks to provide alternatives to car travel, access to these networks is likely to be an important consideration for homebuyers. This study aims to reveal how overlapping access to vehicular, bus, rail, and bicycle networks are related to the sale price of residential properties, and whether access to particular combinations of network access may yield advantages to neighborhood economic development. To investigate this we use a statistical method called hedonic regression, which assesses thousands of individual properties according to a bundle of attributes that include property-based measures, such as improvement value and quality of construction, as well as place-based measures, such as access to transportation networks. Parameters of the model reveal the portion of a sale price that can be associated with each attribute. The study is based in the city of Baltimore, which is home to a handful of small transit systems as well as a bourgeoning on-street bicycle network. While these networks are limited in scope compared with some cities, Baltimore provides useful insight on the early-stage development of alternative modes that is representative of many mid-sized American cities.