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Homes Close to Fast Transit: The Value is Still Rising

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HOMES CLOSE TO FAST TRANSIT: THE VALUE IS STILL RISING

A NITC report examines the economic impacts of Lane Transit District's Emerald Express (EmX), a BRT system in Eugene, Oregon.

The Issue

Bus Rapid Transit, or BRT, is often seen as an economically powerful transit option, providing high-speed service with a generally lower price tag than a light rail system. It seems intuitive that a location-efficient area, with transportation access boosted by BRT, would be an economically desirable place to live; offering access to jobs, shopping and other destinations. Little research, however, has been done in the United States examining to what extent BRT actually affects property values. The goal of this NITC study, led by Victoria Perk and Martin Catalá of the Center for Urban Transportation Research at the University of South Florida in partnership with Lane Transit District and the Florida Department of Transportation, was to provide a more robust understanding of how BRT services in the U.S. affect surrounding residential property values.

This research contributes to the relatively small body of literature on property value impacts of BRT in the U.S. by conducting a case study on Lane Transit District's EmX BRT service in Eugene, Oregon, using econometric modeling techniques to estimate changes in property values associated with the BRT. The analysis is based on hedonic price regression analysis, where sale prices are modeled using several property characteristics that contribute to the market or sale price. The findings of this research indicate that the EmX BRT system does positively impact surrounding single-family home sale prices.

The Research

The researchers applied hedonic regression analysis to estimate the impact of access to BRT stations on residential properties surrounding the EmX

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THE ISSUE

Only two previous studies in the U.S. (Pittsburgh and Boston) had examined the relationship between Bus Rapid Transit (BRT) and residential property values.

THE RESEARCH

The research compared:

- Market sale prices of single-family homes;
- Network distance (in meters) from the home to the nearest BRT station;
- Other variables, such as the age and size of the home, known to affect housing market values.

IMPLICATIONS

This research contributes to a growing, but still relatively small, body of literature on property value impacts of BRT in the United States.

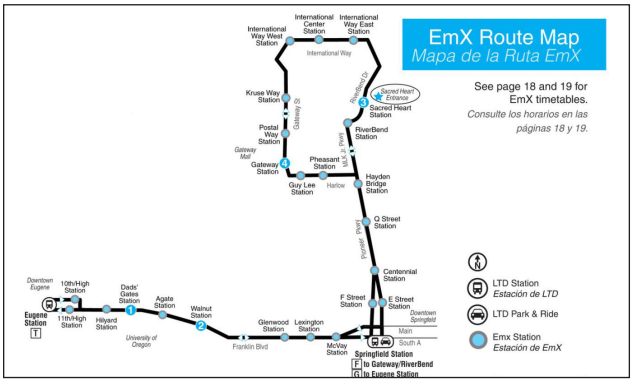
Photo: EmX bus in Eugene, Oregon. Photo courtesy of Lane Transit District.

BRT system. Housing prices were expressed as a function of various housing characteristics, like the age and size of the home and the number of bedrooms and bathrooms. They collected both physical and locational characteristics. One of the factors recorded was the distance (in meters) from each single-family home to the nearest BRT station.

The case study site for this research, Lane Transit District in Eugene, Oregon, operates the Emerald Express (EmX) a full-featured BRT system operating for most of its route alignment along an exclusive median guideway. The EmX is characterized by stylized transit vehicles and other rail-like features including signal priority at intersections, realtime customer information at stations, and off-board fare collection. The EmX is distinctively branded and many of its stations include installations of unique public art. The EmX BRT services were selected over a light rail option to connect downtown Eugene with the Gateway area of Springfield. The first line, approximately 4 miles, runs east/west along the Franklin corridor connecting downtown Eugene with downtown Springfield. The study found that the EmX line had a significant positive impact on property values, which stands to benefit the community as a whole: the related taxes can be used to pay for transportation and other infrastructure, further enhancing the economic development of the community.

Implications

Overall, the findings suggest that proximity to the EmX BRT stations has a statistically significant, positive impact on the actual market sale prices of area single-family homes. One of the more interesting aspects of the findings is that the effects of the BRT stations on the sale prices of single-family homes is increasing over time, as the EmX service continues to mature. The results support the hypothesis that proximity to EmX BRT stations has a positive impact on surrounding residential property values. While the EmX BRT is only one case study, the contribution is expected to be significant on a national scale because it is only the third U.S. study within the past ten years on this topic for the BRT mode. As such, there is still a need for even more research on this topic. The cities currently operating BRT in the U.S. (including Pittsburgh, Boston, Los Angeles and Cleveland) vary in size, density, and other characteristics which could lead to different results regarding the impacts of the transit services on land values. Eugene is one of the relatively smaller cities operating full-featured BRT and it is characterized as a lower density, university town. Future research ideas include applying this or a similar methodology to other BRT systems in the U.S., as well as analyzing the impacts on other types of properties, and also refining the method by using more advanced econometric or geo-spatial techniques.



EmX Route Map

This map shows the route of Lane Transit District's EmX BRT line, which connects downtown Eugene to Springfield, Oregon.

PROJECT INFORMATION

TITLE: Impacts of Bus Rapid Transit (BRT) on Surrounding Residential Property Values

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